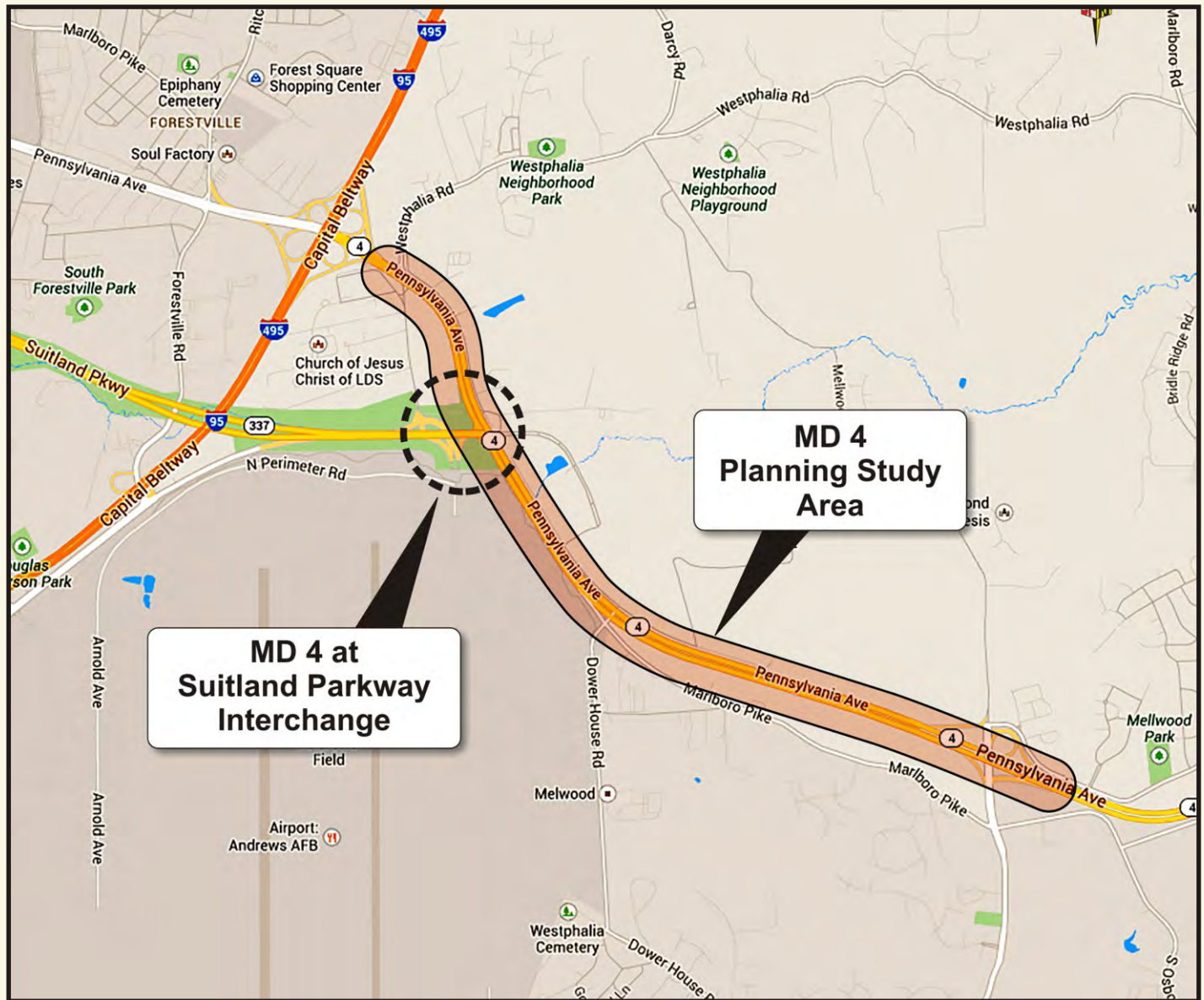




MD 4 AT SUITLAND PARKWAY INTERCHANGE CONSTRUCTION ENVIRONMENTAL ASSESSMENT

National Capital Parks - East Suitland Parkway



MD 4 AT SUITLAND PARKWAY INTERCHANGE CONSTRUCTION ENVIRONMENTAL ASSESSMENT REVIEW DRAFT – June 2014

PROJECT SUMMARY

INTRODUCTION

The Maryland State Highway Administration (SHA) is proposing transportation improvements to the existing intersection of MD 4 and Suitland Parkway. Suitland Parkway is owned by the United States Government and under the jurisdiction of the National Park Service (NPS) National Capital Parks-East. As such, construction activities tied to the proposed improvements would require temporary occupancy of NPS lands through issuance of a Special Use Permit. Additionally, improvements at this intersection would require a transfer of NPS land to SHA at the eastern terminus of the Suitland Parkway to accommodate the expanded footprint of the proposal. The project area is located immediately northeast of Joint Base Andrews Naval Air Facility Washington (JBA), approximately one mile south of the Capital Beltway (I-95/I-495).

PURPOSE OF AND NEED FOR THE ACTION

The purpose of the action is to facilitate transportation improvements at the intersection of MD 4 and Suitland Parkway. This action would increase roadway capacity to meet existing and projected travel demands along the MD 4 corridor and address safety concerns. The action is needed because the corridor currently experiences excessive traffic congestion, which is projected to increase as future development brings more commuters to the area.

OVERVIEW OF THE ALTERNATIVES

This Environmental Assessment (EA) analyzes the no action alternative (Alternative 1) along with two action alternatives (Alternatives 2 and 3) for the MD 4 at Suitland Parkway Interchange Construction Permit Authorization. In addition to the permit authorization, either action alternative requires a permanent land transfer to facilitate the proposed transportation improvements. Alternative 2 would construct a diamond roundabout interchange, requiring approximately nine acres of permanent land transfer. The Federal Highway Administration (FHWA) issued a Finding of No Significant Impact (FONSI) for this alternative in May 2000. Alternative 3 would be a signalized diamond interchange requiring approximately seven acres of permanent land transfer. The interchange would be grade-separated and consist of a signalized diamond interchange with a two-lane directional ramp from northbound MD 4 to westbound Suitland Parkway. The centerline of MD 4 would be shifted approximately 75 feet east to reduce impacts to Suitland Parkway. The SHA has determined that Alternative 3 is the Preferred Alternative because it would best meet the project purpose and needs. Through continued coordination with SHA and FHWA, the NPS agrees that Alternative 3 is the Preferred Alternative.

PROJECT SUMMARY

Impacts of the proposed alternatives were assessed in accordance with the National Environmental Policy Act (NEPA) and the NPS's Director's Order 12 (DO-12): Conservation Planning, Environmental Impact Analysis, and Decision-making, which requires impacts to park resources, be analyzed in terms of their context, duration, and intensity (NPS 2001). Several impact topics have been dismissed from further analysis because the proposed action alternatives would result in negligible to no effects to those resources. No major impacts are anticipated as a result of this project.

Note to Reviewers and Respondents:

If you wish to comment on this EA, you may mail the comments directly or submit them electronically to NPS. Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment – including your personal identifying information – may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Mailed comments can be sent to:

Superintendent, National Capital Parks - East
MD 4 at Suitland Parkway Interchange Construction EA
1900 Anacostia Drive S.E.
Washington, DC 20020

Comments can also be submitted on-line by following the appropriate links at:

<http://parkplanning.nps.gov/md4>

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CHAPTER 1: PURPOSE AND NEED

1.1 INTRODUCTION

The Maryland State Highway Administration (SHA) is proposing roadway improvements that would upgrade the existing four-lane, three-mile section of MD 4 (Pennsylvania Avenue) from east of the Capital Beltway (I-95/I-495) to west of MD 223 to a multi-lane, fully access-controlled highway (**Figure 1**). SHA's proposal includes three grade-separated interchanges along the three-mile study area where MD 4 currently intersects with Westphalia Road, Suitland Parkway, and Dower House Road. Upgrades to the MD 4/Suitland Parkway intersection would require a Special Use Permit from the National Park Service (NPS) for temporary occupancy of NPS lands during construction. Construction of the proposed improvements would also require a land transfer from NPS to SHA to accommodate the expanded footprint of the proposed improvements. The focus of this Environmental Assessment (EA) is the proposed improvements at the existing MD 4/Suitland Parkway intersection. The NPS is undertaking this environmental review of SHA's proposal to evaluate impacts to Suitland Parkway's natural and cultural resources that would occur as a result of the proposed project, as required by the National Environmental Policy Act (NEPA: 1969, as amended) and other legal mandates. Compliance with the National Historic Preservation Act (NHPA: 1966, as amended) and Section 4(f) is being completed as a separate consultation process, parallel to the completion of this EA.

Suitland Parkway, under the jurisdiction of NPS National Capital Parks-East (NACE), is a four-lane divided limited-access roadway that connects Joint Base Andrews Naval Air Facility Washington (JBA) in Prince George's County, Maryland with the Anacostia River in southeast Washington, D.C. Suitland Parkway was constructed in 1944 and is listed on the National Register of Historic Places (NRHP).

This EA analyzes the potential impacts of three alternatives at the intersection of MD 4 and Suitland Parkway: the no action alternative (Alternative 1), a roundabout diamond interchange design (Alternative 2) and a signalized diamond interchange design with a directional ramp (Alternative 3). A detailed description of these alternatives follows in **Chapter 2**. Alternatives 2 and 3 would include the aforementioned land transfer; however, the acreage required differs between the alternatives.

This document has been prepared in accordance with NEPA and the associated implementing regulations, 40 Code of Federal Regulations (CFR) 1500-1508, and the NPS Director's Order 12 (DO-12) and Handbook (Conservation Planning, Environmental Impact Analysis, and Decision-making [NPS 2001]). Compliance with Section 106 of the NHPA has been conducted concurrently with the NEPA process and documentation is also presented in this EA.

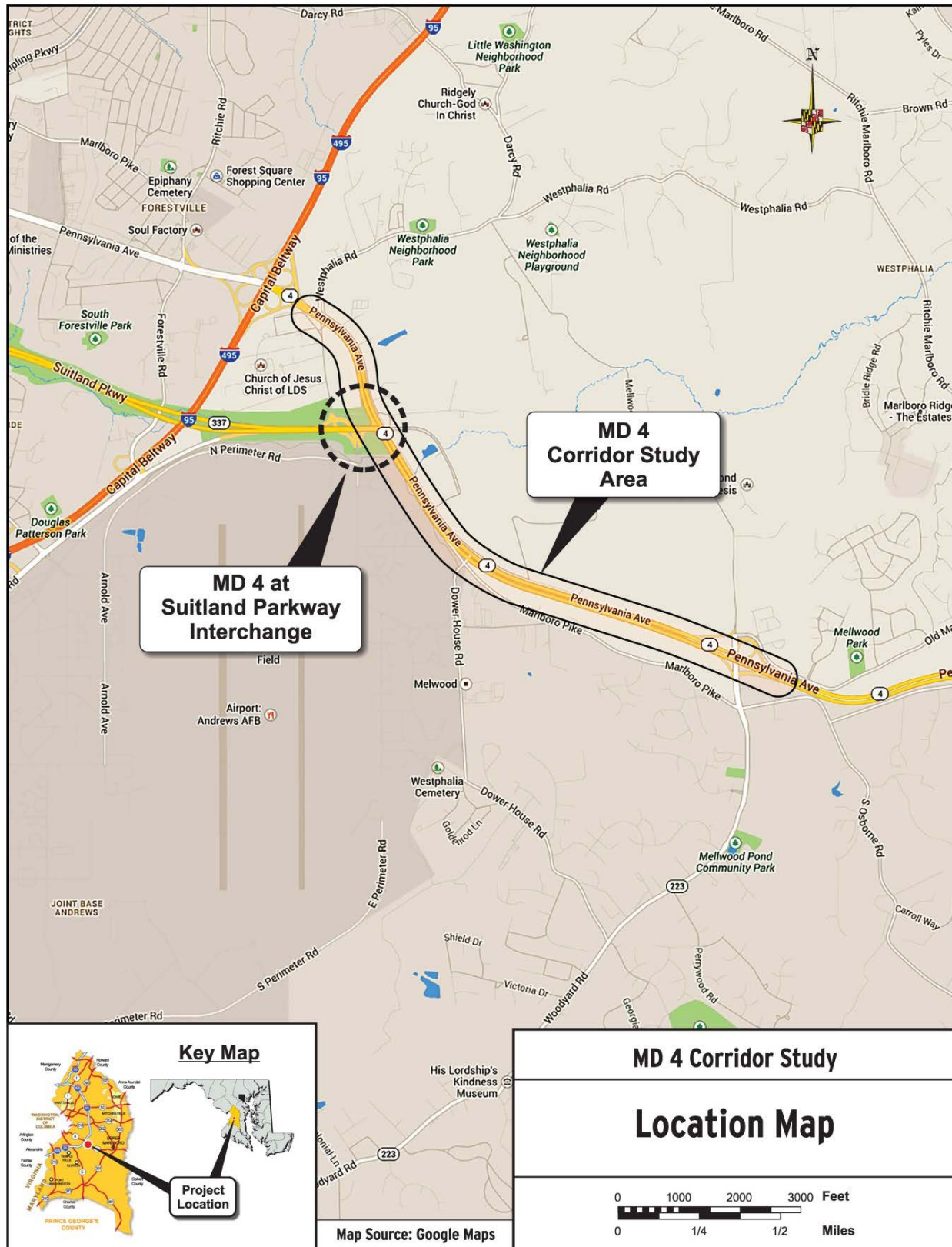


Figure 1: MD 4/Suitland Parkway Location Map

1.2 PURPOSE OF AND NEED FOR THE ACTION

The purpose of the action is to facilitate transportation improvements at the intersection of MD 4 and Suitland Parkway. This action would increase roadway capacity to meet existing and projected travel demands along the MD 4 corridor. The action is needed because the corridor currently experiences excessive traffic congestion, which is projected to increase as future development brings more traffic to the area. In order to facilitate the proposed improvement, construction activities would require temporary occupancy of NPS lands through issuance of a Special Use Permit. An exchange of lands between NPS and SHA would be required to accommodate the expanded footprint of the proposal.

The *2005 Westphalia Comprehensive Concept Plan* (Prince George's County 2005) promotes construction of a high-density, mixed-use development core northeast of MD 4 to Ritchie Marlboro Road and from the Rural Gateway to the Capital Beltway. This plan calls for 6,000 total acres of development, including approximately 15,000 new residential units, up to 4.6 million square feet of employment space, and an estimated 700,000 square feet of retail space. Seven new schools, and new police, fire and rescue, library, and health facilities are also expected. The *2007 Approved Westphalia Sector Plan and Sectional Map Amendment* (Prince George's County 2007) supports and guides this development concept.

The JBA consists of approximately 4,300 acres within the study area and is a major employment center in Prince George's County. The *Joint Land Use Study* estimated the 2008 Base population at approximately 17,000, which includes active duty military, civilian employees, and dependents; an additional 2,400 personnel are expected to come from the closure of other bases under the Base Realignment and Closure (BRAC) Program (JBA 2009).

Level of Service (LOS) on expressways and freeways, with uninterrupted flow conditions, is ranked from Level A (free traffic flows at high speeds with low volume) to Level F (total breakdown of traffic flow with frequent delays at high traffic volumes). Traffic congestion occurs along the MD 4 corridor as a result of ongoing development and growth in commuter traffic from Anne Arundel County, Calvert County, and Southern Prince George's County to Washington, D.C. A 2011 traffic analysis indicated that MD 4 at Suitland Parkway had an average Annual Daily Traffic (ADT) of 60,500 vehicles and operated at a LOS of F during peak hours in the morning and evening. Eight percent of the existing and future volumes are comprised of truck traffic. By 2030, ADT at the MD 4/Suitland Parkway intersection is projected to reach 84,450 vehicles, which would impact roadway congestion and travel time. The 2030 projected volumes indicate peak volumes on northbound MD 4 to westbound Suitland Parkway with morning volumes exceeding 2,100 vehicles per hour. The volume from eastbound Suitland Parkway to southbound MD 4 is expected to exceed 1,900 vehicles per hour.

Crash data were collected for MD 4 from Dower House Road to I-95 from January 2010 to December 2012. Within the study period, the MD 4 corridor had a total of 171 reported crashes. There were no fatal crashes, 64 injury-related crashes, and 107 property-damages. The overall crash rate (123.7 crashes/100 million vehicle miles (mvm)) for the corridor is comparable to the statewide average rate (125.9 crashes/100 mvm) for similar state-maintained highways. Of the crash types, the study area's "Other Cause" crash rate (11.6 crashes/100 mvm) is higher than the statewide average rate (1.9 crashes/100 mvm). Rear-end collisions occur at a higher rate (60 crashes/100 mvm compared to the statewide average of 54.6 crashes/100 mvm), but were not found to be significantly different. Sideswipe

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and angle crashes were the second and third leading types of crashes. Key factors contributing to the high crash rates are the high volume of vehicles at intersections, weave movements, the high number of conflict points, and the lack of access controls.

The number of crashes in the vicinity of the MD 4 intersection at Suitland Parkway (within 0.5 miles) was 22 crashes in 2010, 26 in 2011, and 13 in 2012. Approximately half of the crashes along the study corridor occurred at this intersection. Rear-end crashes were the predominant intersection crash type. “Following too closely” and “failing to obey the traffic signal” were the cause for most of the crashes. Almost half of the crashes occurred at night.

1.3 PROJECT BACKGROUND

On May 19, 2000, the Federal Highway Administration (FHWA) approved the MD 4 Planning Study Finding of No Significant Impact/Section 4(f) Evaluation (FONSI). The Selected Alternative included the construction of a diamond roundabout interchange (Alternative 2) at the intersection of Suitland Parkway and MD 4 (SHA 2000). The Selected Alternative would have required approximately nine acres of permanent land transfer from NPS to SHA. A Value Engineering (VE) study, conducted in October 2004, found that changes in zoning by Prince George’s County for the area surrounding the intersection of Suitland Parkway and MD 4 required revisions of the traffic forecasts used to design the FONSI Selected Alternative diamond roundabout interchange. Based on updated traffic projections, the VE study team concluded that the two-lane roundabout interchange design would, upon opening, operate at a failing level of service during the morning and evening peak hours. The VE study recommended design changes to better accommodate capacity needs. The recommendations are reflected in the signalized diamond interchange with a directional ramp (Alternative 3) to convey traffic from northbound MD 4 to westbound Suitland Parkway (SHA 2004). Detailed descriptions of Alternatives 2 and 3 are provided in **Chapter 2**.

1.4 SITE DESCRIPTION

The project area is located approximately 10 miles southeast of Washington D.C., about one mile east of the Capital Beltway at the eastern terminus of Suitland Parkway.

This section of MD 4 is the only portion of the roadway between the Capital Beltway and US 301 that is not fully access-controlled. The existing MD 4 typical section from the Capital Beltway east to Dower House Road is four lanes, two lanes in each direction. Outside shoulder use is permitted in the northbound direction during the morning peak hours, when commuter traffic is heaviest. A variable width grass median is provided throughout the project limits. The intersection of MD 4 and Suitland Parkway is currently a four-legged, at-grade, signalized intersection. MD 4 forms the northern and southern legs of the intersection; Suitland Parkway approaches from the west; and Presidential Parkway approaches from the east. The intersection includes two left-turn lanes at both the northbound approach of MD 4 and the westbound approach of Presidential Parkway. A right-turn lane from MD 4 northbound provides access to Armstrong Lane and Westphalia Center Court North approximately 300 feet north of the Suitland Parkway intersection. Additionally, Suitland Parkway provides access to the JBA North Gate via a trumpet interchange approximately 0.3 mile west of the MD 4 intersection. A sidewalk along the west side of Presidential Parkway provides pedestrian access between businesses along this route and

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connects to the service road that runs parallel to MD 4; however, no cross-walks or other pedestrian facilities exist at the intersection of MD 4 and Suitland Parkway/Presidential Parkway.

The Suitland Parkway spans 9.2 miles (2.8 miles in Washington, D.C. and 6.4 miles in Maryland) and runs from the I-295 and South Capitol Street Interchange to the intersection with MD 4 (just northeast of JBA). It passes through a 418.9 acre corridor managed by NPS. The NPS boundary for Suitland Parkway terminates immediately west of the MD 4 intersection. The JBA is located immediately southwest of the project area. Businesses lie to the northwest and southeast of the project area. Industrial and commercial properties are located northeast of the intersection.

1.5 SIGNIFICANCE OF SUTLAND PARKWAY

Suitland Parkway was conceived by the National Capital Park and Planning Commission, now the Maryland-National Capital Park and Planning Commission (M-NCPPC), in 1937. It was one of several parkways built in the Washington, D.C. area. The Suitland Parkway links JBA to Washington D.C. and was constructed during World War II to improve transportation for defense industry employees. It opened to traffic on December 9, 1944.

The Parkway corridor is extensively landscaped with larger trees in the medians, grassy areas, and developments screened where necessary to present a rural-like setting. It has hosted both triumphal and mournful processions of public officials, including presidents returning from diplomatic endeavors to the funeral procession of President John F. Kennedy. Presently, it serves commuters and local traffic (NPS 1995).

The Suitland Parkway is a historic district listed in the NRHP. It is part of the multiple property submission for the “Parkways of the National Capital Region, 1913-1965”, under both Criterion A for its association with events that have made a significant contribution to the broad patterns of our history and Criterion C for its embodiment of the distinctive characteristics of a type, period, or method of construction, or representation of the work of a master, or possession of high artistic value, or representation of a significant and distinguishable entity whose components may lack individual distinction (NPS 1995).

The Suitland Parkway is a nationally significant resource eligible for the NRHP for transportation and landscape architecture related to the parkway system developed during the first half of the twentieth century. The parkways of the national capital reflect the culmination of several national trends after the turn of the twentieth century: the City Beautiful movements' emphasis on integrated urban green space; automobiles and the rapid development of road systems; and the decline in the quality of city living and resulting popularity of outdoor recreation. Suitland Parkway represents a utilitarian roadway with design features intended to move traffic expeditiously, but with elements of design intended to convey a scenic driving experience characteristic of earlier parkways (NPS 1995).

Suitland Parkway is also historically significant because it is associated with key historical figures that played important roles in planning and design, including Gilmore D. Clarke and Jay Downer, principal designers of the Westchester County and Virginia parkways. The M-NCPPC Chairman Frederick Delano

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and Thomas Jeffers of the M-NCPPC also had substantial roles in the origins of the Parkway, especially when funding sources seemed exhausted because of the Great Depression and World War II (NPS 1995).

The Suitland Parkway Bridge over the entrance ramp to JBA North Gate is a contributing element of the NRHP-listing. It is one of the seven bridges that the Public Roads Administration contracted and constructed on the alignment of the Suitland Parkway in 1944. These bridges consist of double reinforced concrete rigid frame arches that have stone-faced wing wall and spandrels, trimmed with granite dimensioned masonry (NPS 1995).

The NPS currently uses their 1984 Park Road Standards to define the purpose and guidelines of their roadways. The Suitland Parkway is defined as a Class VII Urban Parkway meaning, “these facilities serve high volumes of park and non-park related traffic and are restricted, limited-access facilities in an urban area. This category of roads primarily encompasses the major parkways which serve as gateways to our nation’s capital. They serve as attractive, landscaped gateways and share many of the high-speed, high-volume traffic characteristics of expressways of the state and Federal highway network. Traffic safety must also be considered as well as the protection and enhancement of landscape, aesthetic, environmental, and cultural characteristics. These parkways are intended to blend high-volume traffic safety with the values of the NPS (NPS 1984).”

1.6 RELATIONSHIP TO LAWS, EXECUTIVE ORDERS, POLICIES, AND OTHER PLANS

The NPS is governed by laws, regulations, and management plans applicable to the alternatives involved in this NEPA analysis.

1.6.1 Applicable Federal Laws, Executive Orders, and Regulations

National Environmental Policy Act of 1969, as Amended

The NEPA was passed by Congress in 1969 and took effect on January 1, 1970. It was signed in response to an overwhelming national sentiment that federal agencies should take a lead in providing greater protection to the environment. The NEPA establishes environmental policy for the nation, provides an interdisciplinary framework for federal agencies as they assess and disclose environmental impacts, and contains “action-forcing” procedures to ensure that federal agency decision-makers take environmental factors into account. It also established a Council on Environmental Quality (CEQ) (42 U.S. Code 4321).

U.S. Department of Transportation Act of 1966, as Amended

Section 4(f) of the U.S Department of Transportation Act states that the FHWA and other Department of Transportation (DOT) agencies cannot approve the use of land from publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites unless there is no feasible and prudent alternative to the use of the land and the action includes all possible planning to minimize harm to the property resulting from the use (49 U.S. Code 303, 23 U.S. Code 138). Compliance with Section 4(f) is being completed as a separate process, parallel to the completion of this EA.

Energy Independence and Security Act of 2007

This Act was intended to move the United States towards greater energy independence and security; to increase production of renewable fuels; to protect consumers; to increase the efficiency of products,

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buildings, and vehicles; to promote research on and deploy greenhouse gas capture and storage options; and to improve the energy performance of the Federal Government (42 U.S. Code Ch. 152). Section 1101(c) of this Act requires an evaluation the impact of the potential fuel efficiency savings and clean air impacts of major transportation projects.

National Park Service Organic Act of 1916

This Act established the NP S within the Department of the Interior “to conserve the scenery and the natural and historic objects and wildlife therein and to provide for the enjoyment of the same in such a manner and by such a means as will leave them unimpaired for the enjoyment of future generations” (16 U.S. Code 1).

Capper-Cramton Act of May 29, 1930

This Act authorized funding for the acquisition of lands in the District of Columbia, Maryland, and Virginia for the park and parkway system of the national capital (40 U.S. Code 8701).

National Parks Omnibus Management Act of 1998

This Act was established to more effectively achieve the mission of the NPS by: “enhancing management and protection of national park resources; ensuring appropriate documentation of resource conditions in the National Park System; encouraging other to use the National Park System for study to the benefit of park management as well as broader scientific value; and encouraging the publication and dissemination of information derived from studies in the National Park System” (16 U.S. Code Chapter 79).

Endangered Species Act of 1973

This Act is administered by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service to “provide for the protection of wildlife, fish, and plants that have been identified as in danger of becoming extinct including habitats that have been identified as critical to their survival” (16 U.S. Code 1531).

National Historic Preservation Act of 1966

The NHPA protects buildings, sites, districts, structures, and objects that have significant scientific, historical, and/or cultural value. It is the responsibility of federal agencies to preserve historic and prehistoric resources. Planning and operations must take into account the effects on properties that are listed or eligible for the NR HP (16 U.S. Code 470). Generally, Section 106 of the NHPA requires all federal agencies to consider the effects of their actions on cultural resources listed and/or determined eligible for listing in the NRHP. Compliance with Section 106 of this Act is being completed as a separate process, parallel to the completion of this EA.

Redwood National Park Expansion Act of 1978, as Amended

This Act “reestablishes the provisions set forth in the NPS Organic Act of 1916 and directs the NPS to manage park lands in a manner that would not degrade park values” (P.L. 92 Statute 163).

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Clean Water Act of 1972, as Amended

This Act establishes “the basic structure for the regulation of the discharge of pollutants into waters of the U.S. and quality standards for surface waters. Under this Act, it is against the law to discharge any pollutant from a point source into navigable waters without a permit” (33 U.S. Code 1251).

Clean Air Act of 1970, as Amended

This Act regulates air emissions from stationary and mobile sources and authorizes the Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS) in order to protect public health and welfare and regulate emissions of hazardous air pollutants (42 U.S. Code 7401).

1.6.2 Applicable State and Local Laws, Regulations, Policies, and Plans

Westphalia Comprehensive Concept Plan (2005)

The purpose of this plan is to supplement M-NCPPC planning for the 6,000-acre Westphalia area, Councilman District 6. This plan refines policies established by the 2002 General Plan and the 1994 Melwood-Westphalia plan. The major goal is to provide an updated vision and coordination and detailed guidance for several major developments that have begun to create the long planned Westphalia Community Center.

Westphalia Sector Plan and Sectional Map Amendment (2007)

This plan envisions the development of a unified, well-planned community focused on a high-density, transit- and pedestrian-oriented urban town center with ample public spaces suitable for community events. Improvements at the MD 4 and Suitland Parkway intersection are part of a strategy to develop gateways at key intersections that define Westphalia as an inviting and safe place.

Prince George’s County Approved General Plan (2002)

“The purpose of the General Plan is to provide broad guidance for future growth and development of Prince George’s County while providing for environmental protection and preservation of important land” (M-NCPPC 2002).

Plan Prince George’s 2035 Adopted General Plan (2014)

“The purpose of this plan is to make Prince George’s County a competitive force in the regional economy, a leader in sustainable growth, a community of strong neighborhoods and municipalities, and a place where residents are healthy and engaged” (M-NCPPC, 2014).

1.6.3 National Park Service Executive Orders and Director’s Orders

Director’s Order 12: Conservation Planning, Environmental Impact Analysis, and Decision-Making and Handbook

DO-12 establishes the policies and procedures under which the NPS would fulfill its responsibilities under NEPA. It provides the necessary direction for using interdisciplinary teams, incorporating scientific and technical information, and establishing a solid administrative record of actions (NPS 2001a).

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Director’s Order 77-1: Wetland Protection

DO-77-1 establishes the policies, requirements, and standards to implement Executive Order (EO) 11990: Protection of Wetlands (NPS 2012).

Director’s Order 28: Cultural Resources Management

DO-28 states that the NPS shall operate in accordance with the NPS *Management Policies* to protect and manage the cultural resources in its custody through effective research, planning, and stewardship (NPS 1998).

Director’s Order 25: Land Protection

DO-25 provides the framework for land protection and the process for the acquisition of land and interests in land, within the authorized boundaries of units of the national park system (NPS 2001b).

Director’s Order 52C: Park Signs

DO-52C, along with the Sign Standards Reference Manual, establishes and implements standards for the planning, design, fabrication, installation, inventory, and maintenance of outdoor signs for national parks. The signs subject to these standards include motorist guidance signs both in, and leading to parks; traffic regulatory signs, park and facility identification signs; and other signs relating to safety, wayfinding, resource protection, interpretation, and general park information (NPS 2003).

Director’s Order 87A: Park Road Standards (1984)

DO-87A provides guidance for the construction and maintenance of NPS roads taking into consideration the need for the NPS to protect and preserve the natural and historical resources of the parks (NPS 1984).

Executive Order 11990: Protection of Wetlands

EO 11990 is intended to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial value of wetlands. When plans are being made, EO 11990 requires federal agencies to consider alternatives to wetland sites and limit potential damage of activities affecting wetlands.

Executive Order 13287: Preserve America

EO 13287 states that “it is the policy of the Federal Government to provide leadership in preserving America’s heritage by actively advancing the protection, enhancement, and contemporary use of the historic properties owned by the Federal Government, and by promoting intergovernmental cooperation and partnerships for the preservation and use of historic properties.”

1.6.4 National Park Service Management Policies

The NPS *Management Policies* (NPS 2006) is the basic NPS-wide policy document, adherence to which is mandatory unless specifically waived or modified by the NPS director or certain departmental officials, including the U.S. Secretary of Interior. Actions under this EA are in part guided by these management policies:

- Section 4: Natural Resource Management
- Section 5: Cultural Resource Management
- Section 9: Park Facilities

1.7 SCOPING PROCESS AND PUBLIC PARTICIPATION

Per CEQ Regulations for Implementing NEPA Part 1501.7, “There shall be an early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action.” Scoping is the effort to involve agencies and the general public in determining the issues to be addressed in the environmental document. Among other tasks, scoping determines important issues; eliminates issues that are not important; allocates assignments among the interdisciplinary team members and/or other participating agencies; identifies related projects and associated documents; and identifies other permits, surveys, consultations, etc., required by other agencies.

The project team held an internal scoping meeting on December 12, 2013. During the meeting, the following topics were discussed: project schedule, project purpose and need, environmental issues and impacts topics, and conceptual alternatives.

Agency scoping was conducted at an Interagency Review Meeting facilitated by SHA on February 19, 2014. NPS and SHA project team members presented the project, including the Purpose and Need and Conceptual Alternatives. Agencies with representatives in attendance included the U.S. Army Corps of Engineers (USACE), Maryland Department of the Environment (MDE), Maryland Department of Planning (MDP), U.S. Fish and Wildlife Service (USFWS), the EPA, and the Maryland Department of Natural Resources (DNR). During the scoping meeting, the MDE representative suggested that NPS and SHA consider cumulative impacts to water resources as a result of JBA redevelopment projects.

In addition to internal and agency scoping, public scoping for this EA began on February 26, 2014 and concluded March 26, 2014. Notice of the public scoping period was posted on the NPS Planning, Environment, and Public Comment website (PEPC) (<http://parkplanning.nps.gov/NACE>). NPS also sent email notices of the meeting to individuals and organizations.

During the 30-day public comment period, comments were received from two individuals. One of the commenters cited concerns for traffic within the project area, specifically citing the need for improvements to southbound MD 4 from eastbound Suitland Parkway, as well as improvements to the MD 4 mainline between Dower House Road and Suitland Parkway in order to increase roadway capacity. The other commenter expressed interest in the project and requested to be included on the project mailing list.

1.8 IMPACT TOPICS

1.8.1 Impact Topics Analyzed in this Environmental Assessment

The following impact topics are discussed in **Chapter 3** (“Affected Environment”) and analyzed in **Chapter 4** (“Environmental Consequences”). The topics are resources of concern that could be beneficially or adversely affected by the actions proposed under each alternative and were developed to ensure that the alternatives are evaluated and compared based on the most relevant resource topics. These impact topics were identified based on issues raised during scoping, federal laws, regulations, executive orders, NPS 2006 Management Policies, and NPS knowledge of limited or easily impacted resources. A brief rationale for the selection of each impact topic is given below, as well as the rationale for dismissing specific topics from further consideration.

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Topography and Soils

Improvements at the MD 4 and Suitland Parkway intersection would disturb the topography and soils in the project area. Grading, excavation, and removal of soils would be part of the construction activities. Therefore, impacts to the topography and soils will be further assessed.

Wetlands and Surface Waters

The NPS wetland management policy (DO-77-1) is to support “no net loss of wetlands” as directed by EO 11990. To define wetlands, the NPS uses the Cowardin Classification System, as outlined in *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin 1979). A wetland delineation of the project area identified multiple wetlands and stream resources. The wetlands are identified as forested, emergent, and scrub/shrub types. Due to the presence of wetlands and surface waters in the project area, possible impacts will be further assessed.

Vegetation

Suitland Parkway is bordered by trees that are a defining characteristic of the historic landscape. Improvements to the MD 4 and Suitland Parkway intersection would require clearing of some forested areas. Therefore, impacts to vegetation will be further assessed.

Wildlife Including Rare, Threatened, and Endangered Species

There are a variety of wildlife species that are common in the project area. Improvements to the MD 4 and Suitland Parkway intersection may disrupt and displace wildlife species and/or alter habitat. In a letter dated May 2, 2012 from the DNR, and online certification dated April 2, 2012 by USFWS, no federal or state listed species of concern were identified within the project area (**Appendix A**). Rare, threatened, or endangered species would not be affected by the project. However, impacts to vegetation and construction activity could impact wildlife. Therefore, impacts to wildlife will be further assessed.

Historic Structures and Districts

The Suitland Parkway is listed in the NRHP. The property is a nationally significant resource eligible under Criterion A for transportation and C for landscape architecture related to the parkway system developed during the first half of the twentieth century. Improvements to the MD 4 and Suitland Parkway intersection would impact the Suitland Parkway Historic District. Therefore, impacts to the district will be further assessed.

Cultural Landscapes

The Suitland Parkway is listed in the NR HP and changes to the intersection may impact the cultural landscape of the Parkway. Therefore, impacts to the cultural landscape will be further assessed.

Visitor Use and Experience

Suitland Parkway is a utilitarian roadway designed with features intended to move traffic expediently, but also designed to convey a scenic driving experience characteristic of the early parkways. The protection and enhancement of the landscape, aesthetic and viewshed, environmental, and cultural characteristics is a critical component of use and experience. Improvements to the MD 4 and Suitland Parkway intersection would impact these components. Therefore, impacts to visitor use and experience will be further assessed.

PURPOSE AND NEED

Transportation

MD 4 and Suitland Parkway is currently an at-grade, four-way, signalized intersection. The action alternatives propose to redesign this intersection as a grade separated interchange. The action alternatives would modify access within the project area, affecting the transportation network. Additionally, construction impacts would have temporary effects of transportation within the project area. Therefore, effects on traffic and transportation will be fully analyzed in this EA.

1.8.2 Impact Topics Dismissed from Further Analysis

The following impact topics were eliminated from further analysis in this EA. A brief rationale for dismissal is provided for each topic. Potential impacts to these resources would be negligible and localized.

Geology or Geologic Hazards

The action alternatives call for a redesign of the MD 4 and Suitland Parkway intersection. The action alternatives will require grading for construction, but the geology is not expected to be disrupted. In addition, there are no known geologic hazards in the project area. Therefore, these topics are dismissed from further analysis.

Water Quality

The action activities may affect water quality through temporary exposure of soils, an increase in impervious surface, and proposed stormwater management (SWM). Sediment erosion and sediment control (SE/SC) plans would be prepared in accordance with the MDE *2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control*. Typical mitigation measures of an SE/SC plan include permanent measures such as the establishment of temporary or permanent vegetative cover, slope protection structures, channel stabilization of open channels and existing streams or ditches, sediment barriers across or at the toe of slopes, and protection of storm sewer line inlets to intercept and retain sediment. In addition, temporary best management practices (BMPs), such as installation of silt fence and sediment trapping or filtering, would be utilized during construction to minimize erosion and sedimentation from ground-disturbing activities that expose bare soil. Temporary BMPs would be used only during construction and would be removed once the disturbed area has been permanently stabilized, if applicable. Implementation of such measures during construction would minimize sediment runoff. Stormwater management for the action alternative would be prepared and implemented in accordance with the *2000 Maryland Stormwater Design Manual, Volumes I & II* (MDE 2000), addressing long-term stormwater runoff. As a result of these measures, impacts on water quality would be negligible. Therefore, impacts to water quality are dismissed from further analysis.

Floodplains

EO 11988 (Floodplain Management) requires that the impacts to floodplains be examined as well as the potential risk involved in placing facilities within floodplains. The project site is not located within either a 100- or 500-year floodplain. Therefore, this impact topic is dismissed from further analysis in this EA.

PURPOSE AND NEED

Noise

A temporary increase in noise levels would result from the action alternatives and interchange construction would result in a slight increase in future traffic volumes for the build condition relative to the no-build condition. Suitland Parkway is primarily a transportation corridor for personal vehicles. No truck traffic, which would result in a higher level of noise, is permitted on Suitland Parkway. No residences or businesses are located within the project area, nor are there any approved development plans or other planned noise sensitive receivers (e.g., churches, schools, etc.) in the study area. Therefore, noise has been dismissed as an impact topic in this EA.

Air Quality

The project area is located in the Metropolitan Washington Air Quality Control Region. The USEPA has designated particulate matter less than 10 micrometers (PM₁₀), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), and lead (Pb) as in attainment of the NAAQS. The EPA has designated Washington D.C. as a moderate non-attainment area for the criteria pollutant ozone (O₃) and as a non-attainment area for particulate matter less than 2.5 micrometers (PM_{2.5}). This airshed is in maintenance for carbon monoxide (CO).

The SHA completed an Air Quality Analysis as part of the environmental studies for the MD 4 corridor study in October 2013. The Air Quality Analysis determined that the proposed improvements of MD 4 at the Suitland Parkway intersection in Prince George's County would meet the Clean Air Act and 40 CFR 93.109 requirements for PM_{2.5} and CO. A more detailed hot-spot analysis is not required because the project was not found to be a *project of air quality concern* as defined under 40 CFR 93.123(b)(1). The project would not cause or contribute to a new violation of the PM_{2.5} or CO State and NAAQS, or increase the frequency or severity of an existing violation. This project has been determined to generate minimal air quality impacts for Clean Air Act CAA criteria pollutants and has not been linked with any special mobile source air toxics (MSAT) concerns. As such, this project would not result in changes in traffic volumes, vehicle mix, basic project location, or any other factor that would cause an increase in MSAT impacts of the project compared to that of the no-build alternative.

In November 2013, the Interagency Consultation Group, consisting of FHWA, EPA, MDE and the Metropolitan Planning Organization, concurred with this determination. The report was posted on SHA's website for public comment in December 2013. No comments were received. Based on these findings, the action alternatives would have negligible effects on air quality. Therefore, this impact topic has been dismissed from further detailed analysis in this EA.

Archeology

Based on the results of previous archaeological investigations in the survey area, and the extensive disturbance documented throughout the archaeological survey area, the undertaking would not impact significant archaeological sites. No further archaeological investigations are warranted, as concurred upon by the Maryland Historical Trust (MHT) through a consultation letter dated March 31, 2010. Therefore, this topic is dismissed from further analysis.

PURPOSE AND NEED

Museum Collections

There are no museum collections associated with the project. Therefore, this topic is dismissed from further analysis.

Ethnography

There are no sites, structures, objects, landscape features, or natural resource features that have any assigned traditional legendary, religious, subsistence, or other significance in the cultural system of a group traditionally associated with it. Therefore, this topic is dismissed from further analysis.

American Indian Traditional Cultural Properties

There are no American Indian Traditional Cultural Properties associated with the study area. Therefore, this topic is dismissed from further analysis.

Human Health and Safety

The project would not present a potential safety hazard to the public. Transportation improvements would result in increased safety for travelers on Suitland Parkway and MD 4. Therefore, this topic is dismissed from further analysis.

Land Use

The action alternatives include reconstruction of an existing roadway intersection. Though SHA is acquiring land from NPS, the land is currently being used to facilitate transportation and would continue with the same purpose. As a result, the overall lands use is not expected to change. Therefore, this topic is dismissed from further analysis.

Park Operations and Management

The action alternatives include a land transfer that would result in a minor reduction of the maintenance area of NPS staff. No adverse impacts to park operations or management would occur. As a result this topic is not analyzed in this EA.

Socioeconomics

The action alternatives would result in two business displacements, both located on the eastern portion of the proposed interchange. Displacements include an Exxon service station and the Presidential Corporate Center Visitor's Pavilion. The Exxon station was previously acquired by SHA and has since been demolished. SHA is presently in negotiation with Presidential Corporate Center for the acquisition of the Visitor's Pavilion. The action alternatives may provide a temporary benefit to the local economy with the hiring of construction workers and an increase in local revenue generated by the construction workers and activities. The transportation benefits, including improved mobility and efficiency of the area transportation network to move traffic volumes, would provide a minor economic benefit to the project area. No adverse impact to the socioeconomic environment would occur; therefore, this topic is dismissed from further analysis.

Environmental Justice

EO 12898, General Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires all federal agencies to incorporate environmental justice into their missions by

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identifying and addressing the disproportionately high and/or adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities.

According to the EPA, environmental justice is the:

“...fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations and policies. Fair treatment means that no group of people, including a racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies.”

The goal of ‘fair treatment’ is not to shift risks among populations, but to identify potentially disproportionately high and adverse effects and identify alternatives that may mitigate these impacts. Both minority and low-income populations are present near Suitland Parkway. The action alternatives require no residential relocations. Environmental justice is dismissed as an impact topic for the following reasons:

- The planning team actively solicited public participation as part of the planning process and gave equal consideration to all input from persons regardless of age, race, income status, or other socioeconomic or demographic factors.
- Implementation of the proposed alternatives would not result in any identifiable adverse human health effects. Therefore, there would be no direct or indirect adverse effects on any minority or low-income population.
- The impacts associated with implementation of the proposed alternatives would not have a disproportionate effect any minority or low-income population or community.
- Implementation of the proposed alternatives would not result in any identified effects that would be specific to any minority or low-income community.
- Any impacts to the socioeconomic environment would not appreciably alter the physical and social structure of the nearby communities.

The project has no potential to cause disproportionately high, or adverse impacts, to minority or low income populations; therefore, this topic dismissed from further analysis.

Energy Requirements and Conservation Potential

The project would not result in any adverse impacts relating to energy use, availability, or conservation. Therefore, this topic is dismissed from further analysis.

Climate Change

Based on traffic analysis completed by SHA in 2011, the existing average ADT volume for the MD 4 and Suitland Parkway intersection is 60,500. This volume is projected to increase to an ADT of 84,450 vehicles in 2030, the design year for the project. Construction activities related to the action alternatives would temporarily increase greenhouse gas emissions. However, the action alternatives would reduce current congestion allowing vehicles to travel at more fuel efficient speeds and result in an overall decrease of greenhouse gas emissions. An increase in fuel efficient technology and more stringent

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standards would decrease greenhouse gas emissions overall. The project would not be a contributing factor to climate change. Therefore, this topic is dismissed from further analysis.

CHAPTER 2: ALTERNATIVES

2.1 INTRODUCTION

This EA evaluates three alternatives for transportation improvements at the existing MD 4/Suitland Parkway intersection. These include the No Action (Alternative 1), and two action alternatives: a diamond roundabout interchange (Alternative 2) and a signalized diamond interchange with directional ramps (Alternative 3). Pursuant to DO-12 and the DO-12 Handbook, the NPS is required to identify the preferred alternative if one is known. The SHA has determined that Alternative 3 is the Preferred Alternative because it would best meet the project purpose and needs. Through continued coordination with SHA and FHWA, the NPS agrees that Alternative 3 is the Preferred Alternative. The environmentally preferred alternative has been identified as Alternative 1.

2.2 DESCRIPTION OF ALTERNATIVES

2.2.1 Alternative 1: No Action

The No Action Alternative describes the action of continuing the present transportation conditions. If the No Action Alternative were to be selected, the existing at-grade intersection would remain. The intersection of MD 4 and Suitland Parkway would continue to operate at a LOS F and congestion would remain an issue at the intersection.

2.2.2 Elements Common to Action Alternatives

The following design elements would be common to the implementation of Alternative 2 (diamond roundabout interchange) or Alternative 3 (signalized diamond interchange with directional ramp):

- MD 4 would be lowered and Suitland Parkway would be raised to an overpass, providing a grade separated interchange design;
- The existing loop ramp access from Old Marlboro Pike to westbound Suitland Parkway would be removed;
- Access to southbound MD 4 from Old Marlboro Pike and access to Old Marlboro Pike from southbound MD 4 would be provided via a newly constructed ramp from the realigned Old Marlboro Pike terminus, located immediately north of the Suitland Parkway boundary;
- Utility relocations would occur, including the relocation of an existing high pressure fuel line that runs parallel to the westbound lanes of Suitland Parkway and crosses under Suitland Parkway about 350 feet west of the intersection with MD 4, as detailed below;
- A bike/multi-use path connecting Presidential Parkway and developments north of the project with Old Marlboro Pike parallel to the westbound lanes of Suitland Parkway would be constructed;
- An NPS construction permit would be required to authorize interchange construction and requisite utility relocations; and
- A permanent transfer of land from NPS to SHA via a land exchange.

The relocation of the high pressure fuel line would include the removal of 3,250 linear feet of the existing fuel line from a tie-in location adjacent to the westbound lanes of Suitland Parkway to the existing JBA perimeter fence crossing, which is located adjacent to southbound MD 4. A 355 linear foot segment of fuel line would be abandoned in place as it travels along the rock walls paralleling the westbound lanes of

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Suitland Parkway and under the existing Suitland Parkway Bridge over the entrance ramp to the JBA North Gate. 2,100 linear feet of new fuel line would be laid between the tie-in location and a new crossing under the JBA perimeter fence, resulting in a reduction of 1,150 linear feet of fuel line within this area. The new fuel line would extend south under existing Suitland Parkway, approximately 2,450 linear feet west of the existing intersection with MD 4. The fuel line would continue parallel to the eastbound lanes of Suitland Parkway until turning south to the new JBA perimeter fence crossing, located approximately 1,200 linear feet west of the existing intersection with MD 4. An easement dedicated to the relocated fuel line would be included in the aforementioned land transfer.

2.2.3 Alternative 2: Diamond Roundabout Interchange

Alternative 2 would construct a diamond roundabout at the existing MD 4/Suitland Parkway intersection (**Figure 2**). This alternative was identified in the 2000 FONSI by FHWA and SHA. The interchange would consist of two roundabouts constructed on either side of the MD 4 overpass of Suitland Parkway, at the terminus of the MD 4 on- off-ramps. All traffic traversing the intersection would circumnavigate the two roundabouts located at the ramp terminals of the interchange. Access to the JBA North Gate would not be modified. A short directional ramp would be constructed from the JBA North Gate to MD 4 southbound. This alternative would require a land transfer of 10.9 acres from NPS to SHA to facilitate the improvement and expansion of the intersection MD 4 and Suitland Parkway.

This alternative was identified by FHWA in the 2000 FONSI as the selected alternative and is the subject of a Memorandum of Agreement (MOA) executed in 1999 between the FHWA, NPS, MHT, the Advisory Council on Historic Preservation (ACHP), and SHA.

2.2.4 Alternative 3: Signalized Diamond Interchange with Directional Ramp

Alternative 3 would construct a grade-separated, signalized diamond interchange with a directional ramp at the intersection of MD 4 and Suitland Parkway/Presidential Parkway (**Figure 3**). The centerline of MD 4 would be shifted approximately 75 feet east to reduce impacts to Suitland Parkway. A four-way signalized intersection would be constructed with Suitland Parkway west of MD 4 to control traffic from the southbound MD 4 on- and off-ramps. The eastern leg of the interchange (existing Presidential Parkway) would be extended east as outlined in Prince George's County approved developer plans for the area. The extended east-west route would be renamed Central Park Drive. Presidential Parkway would be realigned to connect with Central Park Drive at an intersection east of the intersection with northbound MD 4 on- and off-ramps.

In addition to raising the profile of Suitland Parkway, it would be widened as it approaches MD 4. In the proposed typical section, the two 12-foot westbound lanes of Suitland Parkway would remain unaltered; however, in the eastbound direction, the two existing 12-foot lanes would be widened to four 12-foot lanes. This lane widening would result in the reconstruction of the south side of the Suitland Parkway Bridge over the entrance ramp to the JBA North Gate. The four lanes would include two through lanes, a combined through right-turn lane, and an exclusive right-turn lane that would proceed onto southbound MD 4 via a channelized right-turn ramp.

From the northbound MD 4 off-ramp, a two-lane directional ramp would be constructed to facilitate a free-flow movement from northbound MD 4 to westbound Suitland Parkway, crossing over existing

Presidential Parkway then curving west to cross over MD 4, descending to a tie-in with westbound Suitland Parkway immediately west of the existing ramp from Old Marlboro Pike and the JBA North Gate.

The existing ramp from Old Marlboro Pike to westbound Suitland Parkway would be removed. Alternative 3 would also remove the existing loop ramp from westbound Suitland Parkway to the JBA North Gate. Access to the JBA North Gate would be provided via a newly constructed road extending from the Old Marlboro Pike access road south, under the directional ramp and the Suitland Parkway Bridge over the entrance ramp to JBA North Gate. The existing ramp from JBA North Gate to southbound MD 4 via Suitland Parkway would be removed. Access to southbound MD 4 would be provided via the aforementioned access road providing a connection to Old Marlboro Pike. By way of this road, drivers would have the option to continue, via a right-hand turn, onto southbound MD 4. The access ramp from JBA North Gate to westbound Suitland Parkway would be reconstructed to align with the directional ramp tie-in to westbound Suitland Parkway.

Alternative 3 would require the permanent transfer of 6.9 acres of Suitland Parkway from NPS to SHA. Areas identified for permanent transfer include:

- The land that would be occupied by the directional ramp from MD 4 northbound to Suitland Parkway westbound as it traverses Suitland Parkway property, north of the Suitland Parkway mainline;
- Suitland Parkway approaches to the proposed interchange from immediately east of the bridge over the entrance ramp to JBA to the existing SHA ROW; and
- The land that would be occupied by the directional ramp connecting eastbound Suitland Parkway with southbound MD 4.

The aforementioned construction permit would be issued for an additional 18-acre easement area, required to facilitate construction including: staging areas, areas for grading and drainage, the resurfacing and reconstruction of the approach roadways, construction of the bike/multi-use path, areas for re-vegetation, and post-construction vegetation monitoring and invasive species management. There would be no permanent change in the ownership of the easement area.

2.3 CONSTRUCTION AND STAGING

For the action alternatives, construction staging would be identified by a Design-Build contractor prior to construction. The staging areas would be selected to minimize resource impacts and meet the needs of the contractor based on the construction phasing plan.

Construction of either action alternative would occur in phases. Drivers of MD 4 and Suitland Parkway and users of the JBA North Gate would be notified in advance of any closures or detours required for construction. Notifications could include electronic signage, postings to the NPS and SHA websites and social network pages, and email blasts to interested parties identified during the planning process.

Construction would begin with clearing and grubbing focused on the east side of MD 4. Activities would include minor grading work and subsequent soil stabilization. Individual utility relocations would occur with the next phase of construction. Once the utilities are in place, the project would be constructed in

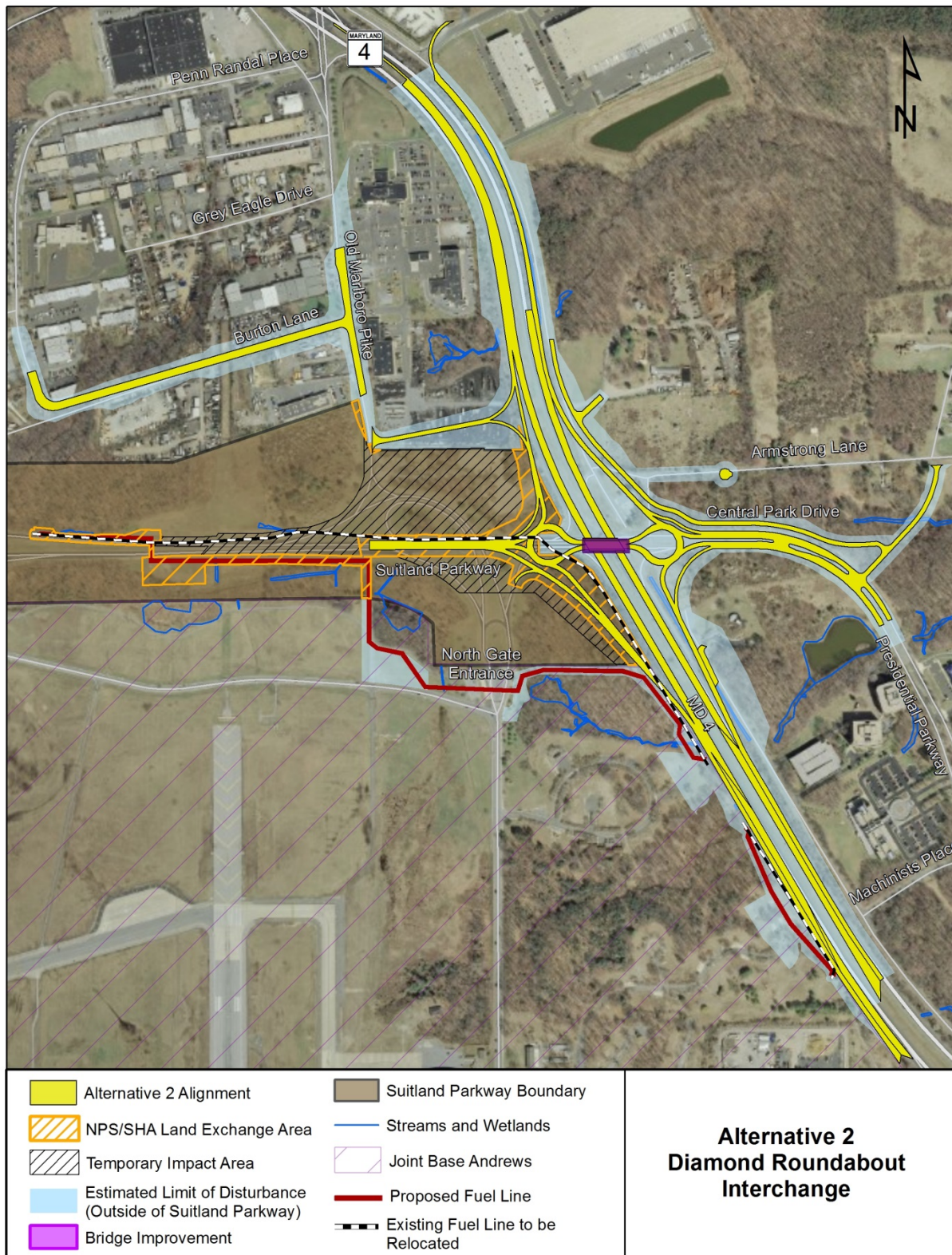


Figure 2: Alternative 2 (Diamond Roundabout Interchange)

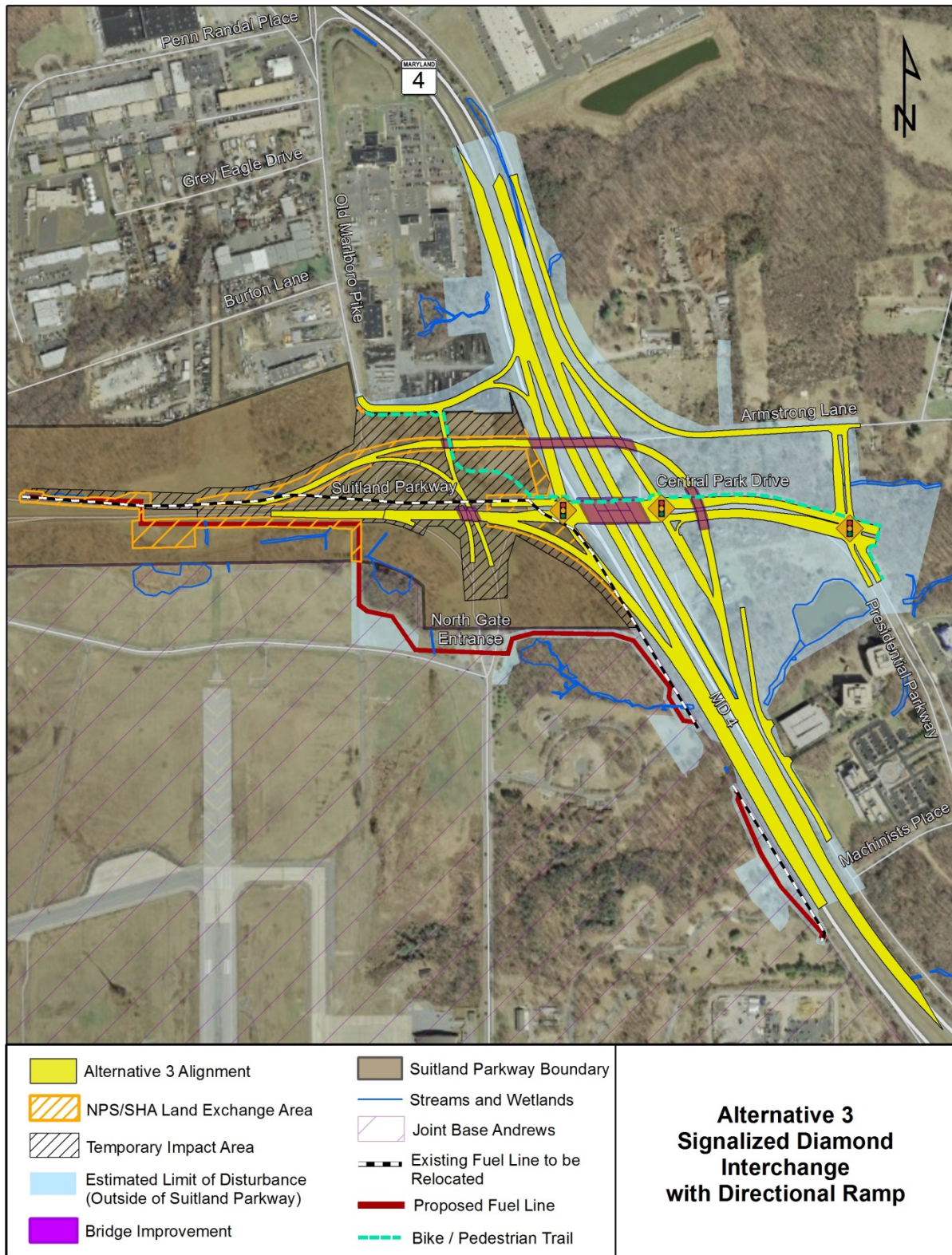


Figure 3: Alternative 3 (Signalized Diamond Interchange with Directional Ramp)

multiple phases. The construction of the project is anticipated to last approximately four construction seasons (years).

2.4 MITIGATION MEASURES OF THE ACTION ALTERNATIVES

The NPS places a strong emphasis on avoiding, minimizing, and mitigating potential adverse environmental impacts. The SHA would ensure all appropriate regulations are implemented to assure compliance during the construction phase of the selected alternative. The NPS would implement an appropriate level of monitoring throughout the construction process to help ensure that protective measures would be properly implemented to achieve their intended results.

2.4.1 Topography and Soils

The SE/SC plans would be prepared in accordance with MDE *2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control*. Typically an SE/SC plan would include permanent mitigation measures such as the establishment of temporary or permanent vegetative cover, slope protection structures, channel stabilization of open channels and existing streams or ditches, sediment barriers across or at the toe of slopes, and protection of storm sewer line inlets to intercept and retain sediment. Implementation of such measures during construction would minimize sediment runoff. In addition, temporary BMPs, such as installation of silt fence and sediment trapping or filtering would be utilized during construction to minimize erosion and sedimentation from ground disturbing activities that expose bare soil. Temporary BMPs would be used only during construction and would be removed once the disturbed area has been permanently stabilized, if applicable.

2.4.2 Wetlands and Surface Waters

Implementation of erosion and sediment control practices, such as installation of a silt fence, sediment trapping or filtering, and other BMPs, would minimize temporary impacts to water quality and wetlands during construction. Per DNR correspondence dated April 29, 2014, no instream work is permitted in Use I streams from March 1 through June 15, inclusive, during any year. Existing riparian vegetation in the area of stream channels would be preserved as much as possible to maintain aquatic habitat and provide shading to the stream. Areas designated for access of equipment and for the removal or disposal of material would avoid impacts to the stream and associated riparian vegetation to the extent feasible. Any temporarily disturbed areas would be restored and re-vegetated (**Appendix A**).

The SHA has coordinated mitigation for stream impacts associated with the action alternatives by providing stream stabilization at Marbury Drive in District Heights, Maryland. In August 2013, SHA confirmed agency support of the proposed mitigation. The proposed stream stabilization would consist of placement/creation of structures such as imbricated riprap, sills and rock vanes, and plunge pools. A stream buffer would also be established through the planting of native plants and the discontinuation of mowing within the stream banks. As outlined by Code of Maryland Regulations (COMAR) 26.23.03.01, MDE does not require mitigation for permanent wetland impacts less than 5,000 square feet. Wetland impacts resulting from the action alternatives would be less than this threshold; therefore, MDE requires no wetland mitigation.

Stormwater management for the action alternative would be prepared and implemented in accordance with the *2000 Maryland Stormwater Design Manual, Volumes I & II* (MDE 2000), addressing long-term

stormwater runoff. Two large SWM facilities, to be located along Presidential Parkway, have been designed to address the requirements. The SHA would construct a new SWM pond just north of Citizens Way, and would expand and enhance an existing pond that is owned by Prince George's County, south of Citizens Way. The two facilities would have a combined capacity of 16 acre-feet, providing both qualitative and quantitative SWM. The SWM design has been reviewed by MDE. Approval is anticipated in Summer 2014.

2.4.3 Vegetation

Protection measures and BMPs would be implemented to avoid impacts to park vegetation to the extent possible. Vegetative protection measures would be detailed in the design phase of the project and may include, but would not be limited to: evaluation of large trees and development of a tree save plan by an arborist or licensed tree expert; installation of tree protection fencing; root pruning for trees whose critical root zones (CRZs) lie within proposed construction area; minimizing tree cutting to the extent possible; and staging construction equipment to avoid damage to park vegetation. The MD Forest Conservation Act requires 1:1 replacement of impacted woodlands (DNR 1991). A landscaping plan would be developed in coordination with the NPS and MHT. The landscaping plan would incorporate grading and planting trees, shrubbery and other plants that are visually and historically compatible with the existing historic landscape of the Suitland Parkway. As part of vegetative maintenance, SHA would, in consultation with NPS and MHT, develop and implement an invasive plant removal plan for the area within the MD 4/Suitland Parkway project limits, including the former NPS storage yard.

2.4.4 Wildlife

Following construction, re-vegetation in accordance with the aforementioned landscaping plan would incorporate native vegetation that, upon maturity, would provide food and shelter for wildlife species displaced by habitat removal during construction.

2.4.5 Historic Structures and Districts

Suitland Parkway is a historic district listed on the NRHP. Each of the action alternatives would require a land exchange that would include the transfer of Suitland Parkway land to SHA. Both of the alternatives would have an *adverse effect* on Suitland Parkway, pursuant to Section 106 (36 CFR 800.5) (**Appendix B**). An MOA was signed and completed on August 20, 1999 that proposed measures to mitigate the impacts to Suitland Parkway based on Alternative 2 (diamond roundabout interchange). Some of these mitigation measures include: an interchange design commensurate with a symbolic entrance to Washington D.C.; construction of low stone walls; a distinctive bridge design, including dressings of stone or with stone abutments; appropriate landscaping including reforestation; timber or stone guardrails; and signage compatible with the NPS standards for size and color (SHA 2000).

Commensurate with the development of Alternative 3 (signalized diamond interchange with directional ramps), a new MOA is being developed (**Appendix C**). Some of the measures to minimize effects to Suitland Parkway include: salvaging and reusing the historic stone cladding from the Suitland Parkway Bridge over the JBA North Gate entrance; matching the color and texture of the mortar used on the south side of the bridge to the original; using a mason with at least five years of experience repointing historic masonry bridges; and using a stone and mortar bonding pattern on the exterior of the parapets and abutments of the directional ramp that is similar to the pattern on the Suitland Parkway Bridge. As

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mitigation for the land transfer, SHA has acquired 12.8 acres of land adjacent to Fort Foote. Fort Foote is situated on the northern bank of the Potomac River, located in southeast Prince George's County, in Fort Washington, Maryland. Like Suitland Parkway, Fort Foote is managed by NPS NACE. The SHA is proposing to transfer this land to NPS as mitigation for impacts to Suitland Parkway. This land would provide a natural buffer between Fort Foote and the surrounding residential area.

As outlined in the draft MOA, should construction unearth previously undiscovered archeological resources, work will be stopped in the area of any discovery and consultation with the State Historic Preservation Officer (SHPO)/Tribal Historic Preservation Officer and the ACHP will be needed as necessary (36 CFR 800.13). In the unlikely event that human remains are discovered during construction, provisions outlined in the Native American Graves Protection and Repatriation Act of 1990 will be followed as appropriate.

2.4.6 Cultural Landscapes

Design considerations of the action alternatives that would minimize harm to Suitland Parkway include carrying Suitland Parkway over MD 4, thus reducing the visual effect to the cultural landscape. Alternative 3 shifts the MD 4 alignment 75 feet east of its current alignment, minimizing the ROW required from NPS. In addition, the two-lane directional ramp reduces to a single-lane prior to tie in with westbound Suitland Parkway, thus reducing the visual impact to the landscape.

A landscaping plan is being developed in coordination with the NPS and MHT. The landscaping plan will incorporate grading as well as planting trees, shrubbery, and other plants that are visually and historically compatible with the cultural landscape of Suitland Parkway. Through consultation with NPS and MHT, SHA has developed signage, lighting and surface treatments for the action alternatives that would be compatible with the cultural landscape.

2.4.7 Visitor Use and Experience

Suitland Parkway users would be notified of changes in traffic patterns as well as road closures by public notification including: detour signage, NPS and SHA websites, social media, email, and listserv notices. Construction equipment would be placed in a manner that causes the least disruption and visual disturbance to Parkway users. Per the draft MOA, appropriate design and landscaping techniques will be utilized to maintain the parkway experience for visitors.

2.4.8 Transportation

All work would be performed in accordance to the SHA work zone traffic control management strategies (SHA 2006). Construction of the interchange will cause changes in traffic patterns as well as road closures. A plan will be developed to maintain traffic and minimize impacts to commuters. The minimization tactics include; electronic notification, detour signage, NPS and SHA websites, social media, emails, and listserv notices.

2.5 ALTERNATIVES CONSIDERED BUT DISMISSED

The FHWA and SHA completed a draft Section 4(f) Evaluation in accordance with 23 CFR Part 774 and 49 U.S.C. 303 to evaluate options that avoid or minimize impacts to Suitland Parkway (**Appendix D**). The alternatives evaluated do not meet the project purpose and need, or would have severe additional

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impacts compared to the action alternatives; therefore, these alternatives were not retained for detailed evaluation in this EA. Each of the alternatives described in the Section 4(f) Evaluation is summarized in Table 1.

Table 1: Alternatives Considered but Dismissed

ALTERNATIVE	DESCRIPTION	REASONS DISMISSED
Upgraded At-Grade MD 4 and Suitland Parkway Intersection East of Existing Intersection	The entire intersection would be expanded in order to accommodate existing and future traffic volumes as well as be realigned to the east. This would allow for the intersection upgrades and avoid impacts to Suitland Parkway property. The expansion of the intersection would be limited to adding a left-turn lane from MD 4 northbound to Suitland Parkway westbound resulting in three left-turn lanes. Additionally, two channelized right-turn lanes from eastbound Suitland Parkway to southbound MD 4 could be constructed without impacting Suitland Parkway property.	This alternative would provide some increase in capacity at the intersection; however, these minor improvements would not address the substantial increase in traffic volumes. The intersection would also maintain the same number of conflict points. The addition of turn lanes would exacerbate the existing difficulties for pedestrians and bicyclists navigating across MD 4.
Shift Signalized Diamond Interchange with Directional Ramp East	The alignment of MD 4 would be shifted east and an interchange would be constructed with the signalized diamond and directional ramp design. This shift of the alignment would require the realignment of Presidential Parkway, which would intersect with Central Park Drive at an at-grade intersection east of the directional ramp.	This alternative would displace four office buildings and the Prince George's County storm water management pond would need to be reconstructed.
Extend Presidential Parkway to Connect to an Expanded Dower House Road Interchange	Suitland Parkway, after bridging over MD 4, would tie into Central Park Drive and Presidential Parkway. Presidential Parkway would be extended south to connect with MD 4 at a proposed interchange with Dower House Road. There would be no access provided between MD 4 and Suitland Parkway.	The projected increase in traffic from this alternative on Presidential Parkway would substantially exceed the functional classification of this roadway. Increased traffic volumes would increase conflict points and present a condition inconsistent with driver expectations coming off of Suitland Parkway. Traffic volume would result in operational failure at the intersections on either side of the interchange. Impacts to existing and planned developments east of MD 4 would result in severe economic impacts.
Single-Point Urban Interchange	Retaining walls would be constructed to allow the placement of MD 4 on- and off- ramps closer to MD 4. Access at the north and southbound on- and off-ramps would be controlled through a single signalized intersection.	This alternative would not provide adequate capacity for the peak hour movement from northbound MD 4 to westbound Suitland Parkway. A large pavement area in the middle of the intersection would present challenges for bikes attempting to get through the entire intersection before the signal changes. This design would not be compatible with pedestrian or bike access.
Diverging Diamond Interchange	The MD 4 on-and off- ramps would converge with the Suitland Parkway/Central Park Drive main route at signalized intersections on either side of the MD 4 overpass. This interchange design would require traffic on the Suitland Parkway/Central Park Drive overpass to drive on the left side of the road. Signals on either side of the overpass would control this movement. This would allow vehicles from the MD 4 off-ramps continuous flow turn lanes in both directions onto Suitland Parkway.	This alternative would require extensive driver education to familiarize users with the operations of this interchange, which would present potential safety concerns. Additional signage, lighting, and pavement would be needed, beyond those typical of a standard diamond interchange. Safety concerns would arise from the complicated pedestrian route for crossing the bridge.
Urban Diamond Interchange	Retaining walls would be used between each MD 4 on- and off-ramp and the MD 4 mainline in order to place the interchange ramps closer to MD 4. The ramps would meet at signalized intersections located above, and on either side of, MD 4.	The signals at the interchange ramps termini would not accommodate the existing and future traffic volumes for this movement, resulting in lengthy intersection queues along the ramp from northbound MD 4.

ALTERNATIVES

ALTERNATIVE	DESCRIPTION	REASONS DISMISSED
Table Roundabout Interchange	The configuration of the intersection would include a large roundabout at the center of the MD 4 and Suitland Parkway interchange that would address all turning movements. A direct ramp from Suitland Parkway eastbound to MD 4 southbound would be provided. The roundabout would be constructed at an elevated grade over MD 4 requiring the construction of two bridges spanning MD 4.	This alternative would result in operational breakdown due to the high volume of traffic entering the roundabout. There would also be pedestrian and bike safety concerns through or around the roundabout from multiple conflict points.
Partial Cloverleaf Interchange	Under this alternative, the MD 4 mainline would be shifted 75 feet east of its existing alignment. Loop ramps would be constructed in both the north and south quadrants on the west side of MD 4. It would also require three separate bridges in addition to numerous access ramps.	This alternative would not provide adequate capacity for the volume of traffic circumnavigating the interchange from northbound MD 4 to westbound Suitland Parkway. The weaving areas compromise the operations of this design.
Folded Diamond Interchange	Double ramps in both the northeast and southwest quadrants of the interchange would be constructed. The approaches of Suitland Parkway and Presidential Parkway would each be widened to ten lanes in order to allow for adequate navigation of the ramps on either side of MD 4.	This alternative would allow adequate traffic capacity and improve safety for vehicles, bikes, and pedestrians; however the Suitland Parkway Bridge over the entrance ramp to JBA North Gate would undergo full reconstruction. The wide roadway, complex design, and numerous ramps would reduce the area of impact to Suitland Parkway, but would cause greater harm to the character of the Parkway.
Eliminate Northbound MD 4 to Suitland Parkway Directional Ramp	A traditional diamond interchange would be constructed without the directional ramp to facilitate travel from northbound MD 4 to Suitland Parkway. This alternative would require all traffic from northbound MD 4 onto westbound Suitland Parkway make a left-turn at the signalized intersection located on the east side of the interchange.	This alternative would not accommodate existing and future traffic volumes, resulting in lengthy intersection queues along the ramp from MD 4.
Eliminate Channelized Right-Turn Ramp	Under this alternative, the channelized right-turn ramp from Suitland Parkway to southbound MD 4 would be eliminated. All traffic traveling from eastbound Suitland Parkway to southbound MD 4 would need to turn right at the signalized intersection on the west side of MD 4.	This alternative would not accommodate existing and future traffic volumes, resulting in lengthy intersection queues along Suitland Parkway.

2.6 PREFERRED ALTERNATIVE

The SHA has identified Alternative 3 as the alternative which best meets the purpose and need for improvements at the MD 4/Suitland Parkway intersection. The elimination of an at-grade intersection in favor of a grade-separated interchange would remove a major conflict point caused by the signal on MD 4, and would separate through traffic on MD 4 from Suitland Parkway. In addition, providing separated free flow lanes for the main movements – from northbound MD 4 to westbound Suitland Parkway and from eastbound Suitland Parkway to southbound MD 4 – would substantially improve operations at the interchange. The left-turns at the ramp terminal signalized intersections on the overpass would have fewer opposing vehicles, compared to the existing signal on MD 4, because of the grade separation from MD 4.

The SHA Value Engineering Study completed in 2004 found that proposed development in Prince Georges, Anne Arundel, and Calvert Counties, would cause a substantial increase in traffic at the MD 4/Suitland Parkway intersection. The traffic volumes would be particularly high for northbound MD 4 to westbound Suitland Parkway, and for eastbound Suitland Parkway to southbound MD 4. To address these conditions, Alternative 3 provides unsignalized directional ramps for both of these movements. Alternative 3 also provides improvements to the JBA North Gate entrance roadways that would better serve the traffic entering and exiting the base.

As detailed in **Chapter 2.5**, FHWA and SHA prepared a draft Section 4(f) Evaluation that further evaluated numerous alternatives to Alternative 3 that would avoid or minimize impacts to Suitland Parkway.

The roundabout interchange design of Alternative 2 would have failing traffic operations upon opening, resulting in lengthy queues along the ramp from northbound MD 4. Moreover, the east-west movement along Suitland Parkway through the interchange would be affected as the volume of traffic entering from the peak flow legs would consume the available capacity of the roundabout and prevent other traffic from entering the roundabout. The interchange would also operate with less efficient weave conditions for traffic leaving JBA toward southbound MD 4, creating additional potential conflict points and reducing the effective management of congestion for this movement. The roundabout design would be difficult for pedestrians and bicycles to navigate safely.

Based on the findings of the SHA Value Engineering Study, the draft Section 4(f) Evaluation, and the analysis in this EA, SHA has determined that Alternative 3 would better accommodate the increased traffic compared to Alternative 2. Therefore, Alternative 3: Signalized Diamond with Direction Ramp is the Preferred Alternative because it would best meet the project purpose and need. Through continued coordination with SHA and FHWA, the NPS agrees that Alternative 3 is the Preferred Alternative.

2.7 ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The NPS is required to identify the “environmentally preferable alternative” in its NEPA documents for public review and comment. The NPS, in accordance with the Department of the Interior policies contained in the Departmental Manual (516 DM 4.10) and CEQ's NEPA's Forty Most Asked Questions, defines the environmentally preferable alternative (or alternatives) as the alternative that best promotes the national environmental policy expressed in NEPA (Section 101(b) (516 DM 4.10). In their Forty Most Asked Questions, CEQ further clarifies the identification of the environmentally preferable alternative, stating “Ordinarily, this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources” (Q6a).

As evaluated against the CEQ regulations, Alternative 1: the No Action Alternative is the Environmentally Preferable Alternative as it would have minimal environmental impacts. Alternative 1 would result in impacts to transportation as traffic volumes increase. Lengthy queues and delays would continue along Suitland Parkway and MD 4. However, there would be no impacts to soils, vegetation, wetlands, wildlife, and cultural resources from Alternative 1. Implementation of either of the action alternatives would improve traffic conditions in the project area; however, the impacts to soils, vegetation, wetlands, wildlife, and cultural resources within the project area would far exceed those impacts that would occur under Alternative 1: the No Action Alternative. A summary of environmental consequences for each alternative is provided in **Table 2**.

Table 2: Summary of Environmental Consequences

AFFECTED RESOURCE	ALTERNATIVE 1: NO ACTION	ALTERNATIVE 2: DIAMOND ROUNDABOUT INTERCHANGE	ALTERNATIVE 3: SIGNALIZED DIAMOND INTERCHANGE WITH DIRECTIONAL RAMP
Topography and Soils	The No Action Alternative would have no impacts on soils or topography.	There would be short- and long-term minor adverse impacts from 18.2 acres of temporary and 7.7 acres of permanent earth disturbance. Alternative 2 would contribute a long-term minor adverse cumulative impact within the project area and watershed.	There would be short- and long-term minor adverse impacts from 20.7 acres of temporary and 6.0 acres of permanent earth disturbance. Alternative 3 would contribute a long-term minor adverse cumulative impact within the project area and watershed.
Wetlands	The No Action Alternative would have no impacts on wetlands.	There would be short- and long-term minor adverse impacts from less than 0.1 acre of temporary and less than 0.1 acre of permanent wetland disturbance. Alternative 2 would contribute a long-term minor adverse cumulative impact within the project area and watershed.	There would be short- and long-term minor adverse impacts from less than 0.1 acre of temporary and less than 0.1 acre of permanent wetland disturbance. Alternative 3 would contribute a long-term minor adverse cumulative impact within the project area and watershed.
Vegetation	The No Action Alternative would have no impacts on vegetation.	There would be short- and long-term moderate adverse impacts from 20.0 acres of permanent vegetation disturbance, including 5.6 acres of forest disturbance. Alternative 2 would contribute a long-term moderate adverse cumulative impact within the project area and watershed.	There would be short- and long-term moderate adverse impacts from 20.7 acres of permanent vegetation disturbance, including 4.7 acres of forest disturbance. Alternative 3 would contribute a long-term moderate adverse cumulative impact within the project area and watershed.
Wildlife	The No Action Alternative would have no impacts on wildlife.	There would be short- and long-term minor adverse impacts from the permanent disturbance of 5.6 acres of forested habitat and less than 0.1 acre of wetland habitat. Alternative 2 would contribute a long-term minor adverse cumulative impact within the project area.	There would be short- and long-term minor adverse impacts from the permanent disturbance of 4.7 acres of forested habitat and less than 0.1 acre of wetland habitat. Alternative 3 would contribute a long-term minor adverse cumulative impact within the project area.
Historic Structures and Districts	The No Action Alternative would have no impacts on historic structures and districts.	There would be long-term moderate adverse impacts from construction, including the transfer of 10.9 acres of NPS lands to SHA. Alternative 2 would have no contribution to cumulative impacts.	There would be long-term moderate adverse impacts from construction, including the transfer of 6.9 acres of NPS lands to SHA. Alternative 3 would have no contribution to cumulative impacts.
Cultural Landscapes	The No Action Alternative would have long-term negligible adverse impacts. Alternative 1 would have no contribution to cumulative impacts.	There would be long-term moderate adverse impacts. Alternative 2 would have no contribution to cumulative impacts.	There would be long-term moderate adverse impacts. Alternative 3 would have no contribution to cumulative impacts.

ALTERNATIVES

AFFECTED RESOURCE	ALTERNATIVE 1: NO ACTION	ALTERNATIVE 2: DIAMOND ROUNDABOUT INTERCHANGE	ALTERNATIVE 3: SIGNALIZED DIAMOND INTERCHANGE WITH DIRECTIONAL RAMP
Visitor Use and Experience	The No Action Alternative would have a long-term moderate adverse impacts. Alternative 1 would have no contribution to cumulative impacts.	There would be short- and long-term minor adverse impacts. Alternative 2 would have no contribution to cumulative impacts.	There would be short-term minor adverse impacts and long-term benefits. Alternative 3 would have no contribution to cumulative impacts.
Transportation	The No Action Alternative would have long-term moderate adverse impacts. Alternative 1 would contribute a long-term major adverse cumulative impact within the project area.	There would be short-term minor adverse impacts and long-term moderate adverse impacts. Alternative 2 would contribute a long-term moderate adverse cumulative impact within the project area.	There would be short-term minor adverse impacts and long-term benefits. Alternative 3 would contribute a long-term cumulative benefit within the project area.

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CHAPTER 3: AFFECTED ENVIRONMENT

This chapter of the EA describes the existing environmental conditions in the area potentially impacted by the alternatives evaluated in this study. The project area is geographically defined in the Purpose and Need as the NPS property between the MD 4 and Suitland Parkway Interchange and where Allentown Road merges with Suitland Parkway. The historic district, cultural resources, and visitor use/experience take into account Suitland Parkway in its entirety.

3.1 TOPOGRAPHY AND SOILS

The project area topography is generally flat to gently rolling, which is characteristic of the Atlantic Coastal Plain Physiographic Province. Elevations range from 280 to 240 feet within the project area.

There are 13 soil types found in the project area, as described in **Table 3** and mapped in **Figure 4**.

Table 3: Mapped Soils in the Project Area

MAP SYMBOL	SOIL MAPPING UNIT	FARMLAND CLASSIFICATION	HYDRIC SOIL (Yes/No)
Px	Potomac-Issue complex	Not Prime Farmland	Yes
UdbD	Udorthents, loamy, 5-15% slopes	Not Prime Farmland	No
MoB	Marr-Dodon-Urban land complex, 0-5% slopes	Prime Farmland Soil	No
MnC	Marr-Dodon complex, 5-10% slopes	Statewide Important	No
SnD	Sassafras-Urban land complex, 5-15% slopes	Not Prime Farmland	No
DfA	Dodon fine sandy loam, 0-2% slopes	Prime Farmland Soil	No
SnB	Sassafras-Urban land complex, 0-5% slopes	Not Prime Farmland	No
BaB	Beltsville silt loam, 2-5% slopes	Prime Farmland Soil	Yes
BuB	Beltsville-Urban land complex, 0-5% slopes	Not Prime Farmland	Yes
GgC	Grosstown gravelly silt loam, 5-10% slopes	Statewide Important	No
UdaF	Udorthents, highway, 0-65% slopes	Not Prime Farmland	No
UrmB	Urban-land-Marr-Dodon complex, 0-5% slopes	Not Prime Farmland	No
WoC	Woodstown sandy loam, 5-10% slopes	Statewide Important	No

Of the 13 soil types within the project area, three are Prime Farmland Soils and three are Statewide Important Farmland Soils. The three Prime Farmland Soils include Marr-Dodon-Urban land complex (MoB), Dodon fine sandy loam (DfA), and Beltsville silt loam (BaB). The three Statewide Important Farmland Soils include Marr-Dodon complex (MnC), Grosstown gravelly silt loam (GgC), and Woodstown sandy loam (WoC) (USDA 2014). However, none of these areas are actively farmed lands.

Predominant soil types are Udorthents, Marr, and Beltsville. Udorthents are soils that have been previously used for refuse or disposal, meaning that the original soil composition has been forever altered and now consists of the original soil (unknown), refuse disposal, and imported fill material. The Marr series consists of deep, well drained soils that are often used for farming, and is formed in a loose layer of unconsolidated, sandy sediments. The Beltsville series consists of very deep, moderately well drained soils that are typically used for woodlands, croplands, and urban development (USDA 2014).



Figure 4: Existing Environmental Features of the Project Area

3.2 WETLANDS AND SURFACE WATERS

Wetlands are areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (USACE 1987). As such, the USACE requires that areas be dominated by hydrophytic vegetation, contain hydric soils, and display indicators of hydrology to be considered a wetland. The NPS definition of wetlands is similar to that of the EPA and the USACE; however, it is broader than the USACE 404 permit program definition and therefore covers a broader range of wetland habitat types. The NPS classifies wetlands based on the USFWS *Classification of Wetlands and Deepwater Habitats of the United States*, also called the Cowardin classification system (Cowardin et al. 1979). Based on this classification system, a wetland must only have one or more of the following attributes:

- The habitat at least periodically supports predominantly hydrophytic (wetland) vegetation;
- The substrate is predominantly undrained hydric soil; or
- The substrate is nonsoil and saturated with water, or is covered by shallow water at some time during the growing season (Cowardin et al. 1979).

In 1977, President Carter issued EO 11990: Protection of Wetlands. In response to EO 11990, the NPS issued DO-77-1: *Wetland Protection* (NPS 2012). This order directed the NPS to use the USFWS definition and methodology as the standard for identifying, classifying, and inventorying wetlands when NPS actions have the potential to adversely impact wetlands. The NPS must also comply with Section 404 of the Clean Water Act (CWA) when those actions involve the discharge of dredged or fill materials in wetlands or other waters of the United States. As required by DO-77-1, the NPS must avoid adverse impacts on wetlands to the extent practicable, must minimize any impacts that cannot be avoided, and must compensate for any remaining unavoidable adverse impacts on wetlands. Wetlands within the project area were delineated in accordance with the DO-77-1 Procedural Manual (NPS 2012).

There are two watersheds located within the project area. The project area lies on the border of the Middle Potomac-Anacostia-Occoquan watershed to the west and the Patuxent watershed to the east. Stream resources identified within the project area (described below as WL048B and WL064) are unnamed tributaries of Cabin Branch, a classified Use I water and associate wetlands, per coordination with DNR dated April 29, 2013 (**Appendix A**). MDE defines a Use Class I water as designated for water contact recreation, fishing, agricultural water supply, industrial water supply, and protection of nontidal warmwater aquatic life. Generally, no instream work is permitted in Use I streams during the period of March 1 through June 15, inclusive, during any year.

The SHA staff conducted a field review to identify resources within the project area in January, 2014. Water resources identified within the project area are depicted on **Figure 4**. A brief description of each resource is provided in the text that follows.

3.2.1 WL048A/B

WL048A/B was originally identified by SHA consultants in 2006. WL048A/B is a perennial stream located north of the JBA security fence on NPS property. It is located west of the North Gate within the project limits. WL048B is fed by discharge from WL064 and a wetland located outside of the project area, and is then culverted beneath an abandoned access road. The stream reemerges as WL048A and

continues to flow westward outside of the study area. The stream appears to be in good condition and provides nutrient transport from other wetlands.

3.2.2 WL064

WL064 is an intermittent stream located adjacent to eastbound Suitland Parkway on NPS property. The stream is fed by a stormwater outfall and flows southwest into WL048B. The stream is in fair condition due to trash from the road within its banks. The stream provides stormwater flow and transports water and sediment into WL048B.

3.2.3 WP049

WP049 is a wetland located within a drainage channel constructed in uplands along eastbound Suitland Parkway on NPS property, within the project limits. The wetland was originally delineated by SHA in 2006 as a palustrine shrub-scrub (PSS1C) wetland. However, in 2014, the limit of this wetland was extended north to connect with the pipe outfall that feeds the wetland. It appears that the previously identified shrubs have been removed. At the time, the wetland was observed to be dominated by common reed (*Phragmites sp.*) and has been reclassified as a palustrine emergent (PEM1C) wetland. The wetland was determined to be in poor condition due to dominance by invasive species and presence of trash from the roadway. The wetland provides water storage and sediment and toxicant retention.

3.2.4 WP062

WP062 is a palustrine scrub-shrub (PSS1A) wetland delineated along eastbound Suitland Parkway on NPS property, within the estimated project limits. The wetland is located in a drainage channel constructed in uplands, which carries flow from WP063 (located on the north side of Suitland Parkway) south into WUS048A. The wetland is dominated by common reed (*Phragmites sp.*) and sweetgum (*Liquidambar styraciflua*) shrubs, and is in fair condition due to the presence of invasive species. The wetland provides sediment and toxicant retention.

3.2.5 WP063

WP063 is a palustrine emergent (PEM1B) wetland delineated along westbound Suitland Parkway on NPS property. The wetland is located within a swale that drains the uplands of the approach to the JBA landing strip. The wetland drains to a culvert beneath Suitland Parkway, which feeds WP062 and WL048A. The wetland is dominated by soft rush. There is only minor presence of invasive species and trash in this wetland, is if therefore considered to be in good condition. The wetland provides nutrient export and groundwater discharge/recharge.

3.2.6 WP065

WPO65 is a marginal, isolated wetland located at the toe of the road embankment along westbound Suitland Parkway on NPS property, within the proposed project limits. The wetland's source of hydrology is runoff from the roadway. WP065 is located mostly beneath the forest canopy, but since few trees are located within the wetland, the wetland was classified as a palustrine emergent (PEM1A) wetland. WP065 is dominated by poison ivy and greenbrier. It is in poor condition due to the marginal nature of the wetland and presence of trash and debris from the road within the wetland. The wetland provides sediment and toxicant retention.

3.3 VEGETATION

A tree survey of the project area was conducted in November 2011 and May 2012 (SHA 2012). On the north side of Suitland Parkway 233 trees were identified and assessed. The most common trees identified were Callery pear (*Pyrus calleryana*), chestnut oak (*Quercus prinus*), sweetgum (*Liquidambar styraciflua*), and Virginia pine (*Pinus virginiana*). The condition of trees in this area was a mix of good, fair, and poor; fair to poor conditions occurred more commonly in forest fragments and along edges. On the south side of Suitland Parkway, two individual 1/10th acre sample plots were evaluated; a total of 70 trees were identified and assessed. The most common trees identified were sweetgum, willow oak (*Quercus phellos*), and red maple (*Acer rubrum*). Generally, these trees were in good to poor condition.

3.4 WILDLIFE

Wetlands within the project area are principally palustrine wetlands associated with the non-tidal tributaries to Cabin Branch. These wetlands, along with isolated trees and forested areas, provide wildlife habitat within the project area. Typical wildlife that can be found in the area includes white-tailed deer (*Odocoileus virginianus*), raccoon (*Procyon lotor*), grey squirrel (*Sciurus carolinensis*), red fox (*Vulpes vulpes*), Eastern cottontail (*Sylvilagus floridanus*), striped skunk (*Mephitis mephitis*), muskrat (*Ondatra zibethicus*), various small mammal species, and various herptile and avian species.

3.5 CULTURAL RESOURCES

For the purposes of this EA, cultural resource impact topics include historic structures and districts, and cultural landscapes. Historic and prehistoric archeological sites, American Indian traditional cultural properties, ethnographic resources, and museum objects were dismissed as impact topics. Compliance with NHPA (1966, as amended), including Section 106, is being completed as a separate process, parallel to the completion of this EA.

3.5.1 Historic Structures and Districts

In letters dated March 6, 1998 and March 31, 2010 (**Appendix B**), SHA contacted MHT regarding the proposed MD 4/Suitland Parkway Interchange project. The SHA considered possible physical, visual, atmospheric, and audible impacts to historic properties in determining the Area of Potential Effects (APE) for the project. Based on research to identify potentially significant architectural resources, SHA identified the Suitland Parkway (PG:76A-22/NR-1175) as the only historic property within the APE of the project.

Suitland Parkway spans 9.18 miles through a 418.9 acre corridor, managed by NPS. The entirety is a historic district listed in the NRHP as part of a multiple property submission for the “Parkways of the National Capital Region, 1913-1965,” under both Criterion A for transportation, and Criterion C for landscape architecture related to the parkway system developed during the first half of the twentieth century (NPS 1995).

Bridges, culverts, curbing, ditches and drop inlets define the contributing resources within the historic district. The Public Roads Administration was contracted for the construction of nine concrete arch bridges with stone facing and generous parapets. The design of these bridges closely followed designs initially used on the Westchester parkways, Mount Vernon Memorial Highway, and Blue Ridge Parkway.

The contributing bridges consist of double reinforced concrete rigid frame arches that have stone-faced wing wall and spandrels, trimmed with granite dimensioned masonry. Seven of these bridges were completed in 1944; two additional bridges were constructed to carry I-95 over Suitland Parkway in 1963. One of these is located within the project area, the Suitland Parkway Bridge over the entrance ramp to JBA North Gate. Additionally, 38 culverts are located along the parkway, 39 drop inlets, 0.14 miles of stone-lined ditches, and 2.89 miles of concrete curbing. None of these features are located within the project area (NPS 1995).

As with other parkways in the Washington, D.C. area, Suitland Parkway is historically significant because it is associated with key historical figures that played important roles in planning and design, including Gilmore D. Clarke and Jay Downer, principal designers of the Westchester County and Virginia parkways. M-NCPPC Chairman Frederick Delano and Thomas Jeffers of the M-NCPPC also had substantial roles in the origins of the Parkway, especially when funding sources seemed exhausted because of the Great Depression and World War II (NPS 1995).

3.5.2 Cultural Landscapes

Cultural landscapes, as defined by the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes, consist of "a geographic area (including both cultural and natural resources and the wildlife or domestic animals therein) associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values." A cultural landscape inventory (CLI) identifies and documents the characteristics of a cultural landscape that make it significant and worthy of preservation. Though no CLI has been completed for Suitland Parkway, structures identified as contributing resources to the historic district along with the landscape elements, described herein, culminate in the cultural landscape that defines Suitland Parkway and makes it significant and worthy of preservation.

The Suitland Parkway is a culmination of popular trends at the beginning of the 20th century. These trends included the City Beautiful movements' emphasis on urban green space, rapid development of road systems for automobiles, decline in the quality of city life, and increase in popularity of outdoor recreation. Suitland Parkway features a gently rolling topography that crosses or follows creek drainages along its length. It is extensively landscaped, with larger trees in the medians, grassy mown areas, and developments screened where necessary to present a rural and park-like setting. Meanwhile the curved design and cloverleaves of the Parkway along with the 55-60 miles per hour design speed allow for a steady drive pace along the corridor. Suitland Parkway represents a utilitarian roadway with design features intended to move traffic expeditiously, but with elements of design intended to convey a scenic driving experience characteristic of earlier parkways (NPS 1995).

3.6 VISITOR USE AND EXPERIENCE

Suitland Parkway is open year round. It serves as an attractive, landscaped gateway to the Capital region; however, it shares many of the high-speed, high-volume traffic characteristics of expressways of the state and Federal highway network. Suitland Parkway services a volume of 32,000 ADT (SHA, 2011). Drivers include commuters as well as visitors to the Capital region. The rural, park-like setting of the Parkway, with its wide medians, large trees, and heavy vegetative screening conveys a driving experience that differs greatly from that of other non-parkway routes in the region. A viewshed is defined as the

geographic area visible to an observer from a specific location. The wide vegetated median, mature trees, stone structures, and rustic timber guardrails combine with views to areas outside of Suitland Parkway as components that together form the viewshed along Suitland Parkway. The viewshed quality directly affects the visitor experience. Protection and enhancement of landscape, viewshed, aesthetic, environmental, and cultural characteristics of Suitland Parkway must be considered along with transportation features as part of the visitor experience.

3.7 TRANSPORTATION

Suitland Parkway is a principal route of travel between Prince George's County, Maryland, and Washington, D.C. It also serves as the primary route of travel from Washington, D.C. to JBA. The western terminus of the Suitland Parkway begins almost immediately upon crossing the Frederick Douglas Memorial Bridge in Washington, D.C. Shortly thereafter, Suitland Parkway intersects with the Baltimore-Washington Parkway. Proceeding east on Suitland Parkway, it intersects with MD 5 providing access to Charles County and St. Mary's County, Maryland. The Parkway intersects with Suitland Road and provides access to the surrounding neighborhoods. Suitland Parkway continues on to intersect with Forestville Road. This road provides access to the Capital Beltway as well as the Forestville neighborhood to the north. Prior to Suitland Parkway's intersection with MD 4, there is an intersection that provides access to the JBA North Gate Entrance as well as Old Marlboro Pike. The eastern terminus of the Suitland Parkway is its intersection with MD 4. MD 4 northbound intersects with Westphalia Road and the Capital Beltway approximately one mile north and continues into Washington D.C. as Pennsylvania Avenue. MD 4 southbound intersects with Dower House Road and proceeds to Upper Marlboro, MD. It then travels south into Anne Arundel County and Calvert County in Maryland.

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CHAPTER 4: ENVIRONMENTAL CONSEQUENCES

This chapter analyzes both beneficial and adverse impacts that would result from implementing any of the alternatives considered in this EA. This chapter also includes definitions of impact thresholds (e.g., negligible, minor, moderate, and major), methods used to analyze impacts, and the analysis methods used for determining cumulative impacts. As required by the CEQ regulations implementing NEPA, a summary of the environmental consequences for each alternative is provided in **Table 2**, which can be found in **Chapter 2** (“Alternatives”). The impact topics presented in this chapter, and the organization of the topics, correspond to the resource discussions contained in **Chapter 3** (“Affected Environment”).

4.1 GENERAL METHODOLOGY FOR ESTABLISHING IMPACT THRESHOLDS AND MEASURING EFFECTS BY RESOURCE

The general approach for establishing impact thresholds and measuring the effects of the alternatives on each resource category includes the following elements:

- General analysis methods as described in guiding regulations for each resource
- Basic assumptions used to formulate the specific methods used in this analysis
- Thresholds used to define the level of impact resulting from each alternative
- Methods used to evaluate the cumulative effects of each alternative in combination with unrelated factors or actions affecting park resources

4.1.1 General Analysis Methods

The impacts analysis follows the guidelines and procedures set forth by the CEQ and DO-12 (NPS 2001). It incorporates the best available knowledge of the region and setting, resources being analyzed, and actions being considered in the alternatives. The applicable analysis method is discussed for each impact topic addressed in this chapter including assumptions and impact intensity thresholds.

4.1.2 Impact Thresholds

The potential impacts of the alternatives are described in terms of type (beneficial or adverse); context; duration (short or long-term); and intensity (negligible, minor, moderate, or major). Definitions of these descriptors are provided below.

Beneficial: A positive change in the condition or appearance of the resource or a change that moves the resource towards a desired condition.

Adverse: A change that declines, degrades, and/or moves the resource away from a desired condition or detracts from its appearance or condition.

Context: The affected environment within which an impact would occur, such as local, parkwide, regional, global, affected interests, society as a whole, or any combination. Context is variable and depends on circumstances involved with each impact topic. As such, the impact analysis determines the context, not vice versa.

Duration: The duration of the impact is described as short-term or long-term. Duration is variable with each impact topic; therefore, definitions related to each impact topic are provided in the specific impact analysis narrative.

Intensity: Because definitions of impact intensity (negligible, minor, moderate, and major) vary by impact topic, intensity definitions are provided separately for each impact topic analyzed.

4.1.3 Cumulative Impacts Analysis Method

The CEQ regulations to implement NEPA require the assessment of cumulative impacts in the decision-making process for federal projects. Cumulative impacts are defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions” (40 CFR 1508.7). As stated in the CEQ handbook, “Consider Cumulative Effects” (CEQ 1997), cumulative impacts need to be analyzed in terms of the specific resource, ecosystem, and human community being affected and should focus on effects that are truly meaningful. Cumulative impacts are considered for all alternatives, including Alternative 1, the No Action Alternative.

Cumulative impacts were determined by combining the impacts of the alternative being considered with other past, present, and reasonably foreseeable future actions. Therefore, it was necessary to identify other ongoing or reasonably foreseeable future projects and plans at Suitland Parkway, and if applicable, the surrounding area. **Table 4** summarizes these actions that could affect the various resources at the parkway, along with the plans and policies of both the NPS and surrounding jurisdictions, which were discussed in **Chapter 1**.

The analysis of cumulative impacts was performed according to the following four steps:

Step 1 – Identify Resources Affected: Fully identify resources affected by any of the alternatives. These include the resources addressed as impact topics in **Chapters 3** and **4** of this document.

Step 2 – Set Boundaries: Identify an appropriate spatial and temporal boundary for each resource.

Step 3 – Identify Cumulative Action Scenario: Determine which past, present, and reasonably foreseeable future actions to include with each resource. These are described in **Table 4**.

Step 4 – Cumulative Impact Analysis: Summarize impacts of these other actions (x) plus impacts of the proposed action (y), to arrive at the total cumulative impact (z). This analysis is included for each resource in **Chapter 4**.

Table 4: Cumulative Impact Scenarios

IMPACT TOPIC	TIME FRAME	STUDY AREA	PAST ACTIONS	CURRENT ACTIONS	FUTURE ACTIONS
Topography and Soils	1970 – 2030 Past: Based on population growth and development that occurred in the area following World War II. Future: 2030, the design year of the project. Most of	Potomac River-Upper Tidal watershed and Patuxent River – Western Branch watershed	Construction of Suitland Parkway. Past county, state, and Federal developments.	Ongoing development as identified in the Westphalia Sector Plan and Sectional Map Amendment (2007), and the JBA 25-Year Strategic Plan.	MD 4 corridor improvements at Westphalia and Dower House Roads. Development of the Westphalia Town Center and Implementation of the JBA 25-Year Strategic Plan.
Surface Waters					
Vegetation					
Wildlife					
Historic Structures and Districts		Suitland Parkway Boundary	Previous surface widening of the Suitland Parkway Bridge and the JBA North Gate entrance.	None identified	None identified
Cultural Landscapes			None identified	The MD 4 project is listed in the MDOT Consolidated Transportation Program (CTP) for FY 2012 to 2017, with only the Suitland Parkway interchange funded beyond the planning phase.	The Prince George's County FY 2014-2019 Proposed Capital Improvement Program identifies additional improvements slated to occur as funding becomes available.
Visitor Use and Experience					
Transportation		MD 4 corridor	SHA and Prince George's County Transportation Projects		

4.2 TOPOGRAPHY AND SOILS

4.2.1 Methodology and Assumptions

Potential impacts to topography and soils are assessed based on the extent of disturbance to natural topographic resources, natural undisturbed soils, and the potential for soil erosion resulting from disturbance. The analysis of possible impacts was based on a review of the Web Soil Survey (NRCS 2014) and topographic maps. The impacts are calculated based on the estimated area of impact required to construct the interchange.

Study Area

The study area for soils and topography is the NPS property between the MD 4 and Suitland Parkway intersection and where Allentown Road merges into Suitland Parkway.

Impact Thresholds

Negligible: The impacts to soil and topography would be at or below the lower levels of detection. Any impacts to soil and topography would be slight.

Minor: The impacts to soil and topography would be detectable. Impacts to undisturbed areas would be small. Mitigation required to offset adverse impacts would be relatively simple to implement and would likely be successful.

Moderate: The impacts to soil and topography would be readily apparent and result in a change to the soil and topographic character over a relatively wide area. Mitigation measures would be necessary to offset adverse impacts and would likely be successful.

Major: The impacts to soil and topography would be readily apparent and substantially change the soil and topographic character over a large area both in and out of the project area. Mitigation measures to offset adverse impacts would be needed, would be extensive, and their success would not be guaranteed.

Duration: Short-term impacts occur in a timeframe equal to or less than the duration of construction for the alternative and long-term impacts would continue to occur following the completion of construction of the alternative.

4.2.2 Impacts of Alternative 1: No Action

Under the No Action Alternative, there would be no change to existing topographical or soil conditions within the Suitland Parkway boundary. No excavation, grading, or removal of soils would occur. This alternative would result in no short- or long-term impacts on soils or topography.

Cumulative Impacts

Alternative 1 would have no impacts to soils or topography; therefore, this alternative would contribute no cumulative impact to soils and topography.

Conclusion

The implementation of the No Action Alternative would result in no short- or long-term direct or cumulative impacts to topography or soils.

4.2.3 Impacts of Alternative 2: Diamond Roundabout Interchange

Construction activities associated with Alternative 2 would result in the temporary earth disturbance of approximately 18.2 acres caused by grading and excavating due to construction activities. Any construction activities would require preparation of an erosion and sediment control plan, in accordance with the MDE 2011 *Maryland Standards and Specifications for Soil Erosion and Sediment Control*. During construction BMPs would be utilized to minimize soil erosion and prevent soils from leaving the project area.

Grading and excavation would permanently impact an area of 7.7 acres, modifying the topography within the project area to accommodate ramps, new roadways, and the bike/multi-use path. Soils impacted by the proposed grading would primarily be Udorthents, or those whose original soil composition was previously altered for the construction of Suitland Parkway and MD 4. Following construction of Alternative 2, re-vegetation in accordance with an approved landscaping plan would ensure the long-term stability of soils within the project area.

Construction of Alternative 2, including the required BMPs and re-vegetation, would have short- and long-term minor adverse impacts to topography and soils.

Cumulative Impacts

The project would contribute to long-term minor adverse cumulative effects to topography and soils that would be expected as a result of past, present, and reasonably foreseeable actions occurring within the park, the Potomac River-Upper Tidal watershed, and the Patuxent River – Western Branch watershed. Planned construction activities include the development of 6,000 acres immediately east of the project area associated with Westphalia and the redevelopment of 600 acres of JBA lands. Additionally, SHA and Prince George's County have planned improvements to the MD 4 Corridor, including construction of interchanges at Westphalia Road and Dower House Road. However, SE/SC plans and BMPs would minimize the long-term reasonably foreseeable actions occurring within the project area and surrounding watershed areas, and thus would result in long-term minor adverse cumulative effects to topography and soils. These effects, in combination with long-term minor adverse impacts of Alternative 2, would contribute to a long-term minor adverse cumulative impact on topography and soils.

Conclusion

Construction of Alternative 2 would result in short- and long-term minor adverse impacts to topography and soils within the project area. When combined with the cumulative effect of past, present, and reasonably foreseeable actions, the long-term minor adverse impacts of Alternative 2 would contribute to a long-term minor adverse cumulative impact to topography and soils.

4.2.4 Impacts of Alternative 3: Signalized Diamond Interchange with Directional Ramp

Construction activities associated with Alternative 3 would result in the temporary earth disturbance of approximately 20.7 acres caused by grading and excavating. Similar to Alternative 2, any construction activities would require preparation of an erosion and sediment control plan, in accordance with the MDE *2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control*. BMPs would be utilized to minimize soil erosion and prevent soils from leaving project area.

Grading and excavation would permanently impact an area of 6.9 acres. This would include modifying the topography within the project area to accommodate ramps, new roadways, and the bike/multi-use path. Soils impacted by the proposed grading would primarily be Udorthents, or those whose original soil composition was previously altered for the construction of Suitland Parkway and MD 4. Following construction of Alternative 3, re-vegetation in accordance with an approved landscaping plan would ensure the long-term stability of soils within the project area.

Alternatives 3, in consideration of the necessary construction impacts, BMPs, and re-vegetation as described herein, would have short- and long-term minor adverse impacts on topography and soils.

Cumulative Impacts

Past, present, and reasonably foreseeable actions occurring within the park and surrounding watershed areas would result in a long-term minor adverse cumulative effects on topography and soils. These effects, in combination with the long-term minor adverse impacts of Alternative 3, would contribute to a long-term minor adverse cumulative impact on topography and soils.

Conclusion

Construction of Alternative 3 would result in short- and long-term minor adverse impacts on topography and soils within the project area. When combined with the cumulative effect of past, present, and reasonably foreseeable actions, the long-term minor adverse impacts of Alternative 3 would contribute to a long-term minor adverse cumulative impact on topography and soils.

4.3 WETLANDS AND SURFACE WATERS

4.3.1 Methodology and Assumptions

The NPS has adopted a “no net loss” of wetlands policy. EO 11990, “Protection of Wetlands,” states that federal agencies are to avoid to the extent possible long-term and short-term impacts associated with the destruction or modification of wetlands and avoid direct and indirect support of new construction in wetlands whenever practical alternatives exist. The USACE regulates development in wetland areas pursuant to Section 404 of the CWA (33 CFR 320–330). NPS DO-77-1: *Wetland Protection* and Procedural Manual 77-1: *Wetland Protection* (NPS 2012) provide NPS policies and procedures for complying with EO 11990 (1977). As stated therein,

Actions proposed by the NPS that have the potential to have adverse impacts on wetlands will be addressed in an EA or an Environmental Impact Statement (EIS). If the preferred alternative in an EA or EIS will result in adverse impacts on wetlands, a “Statement of Findings” documenting compliance with this Director’s Order and Procedural Manual #77-1 will be completed. Actions that may be excepted from the Statement of Findings requirement are identified in the Procedural Manual (NPR 2008a).

This project is exempted from the statement of findings requirement because it includes a small area of impact and thus is an “excepted action” under DO-77-1. The total wetland impact from fill placement of either action alternative would be less than 0.1 acre. The impact analysis and the conclusions for possible impacts on wetlands were based on a review of existing literature and studies and information provided by park staff and other agencies.

Study Area

The geographic study area for wetlands is the NPS property between the MD 4 and Suitland Parkway intersection and where Allentown Road merges into Suitland Parkway. Either action alternative would result in impacts to wetlands and surface waters outside of the Suitland Parkway boundary; however, these impacts and their mitigation are being coordinated separately with USACE and MDE, as appropriate.

Impact Thresholds

Negligible: A change in wetland or surface water size, integrity, or continuity could occur, but would be barely measureable or perceptible.

Minor: A small change in wetland or surface water size, integrity, or continuity could occur due to impacts such as construction-related runoff and the impact would be easily measurable or perceptible. The overall viability of the resource would not be impacted.

Moderate: Impacts to the wetland or surface water would be sufficient to cause a measurable change in the size, integrity, or continuity or would result in a small, permanent loss of wetland acreage.

Major: The impact would cause a measurable change in wetland or surface water size, integrity, and continuity, or a permanent loss of large wetland areas that would be substantial and highly noticeable.

Duration: Short-term impacts occur in a timeframe equal to or less than the duration of construction for the alternative and long-term impacts would continue to occur following the completion of construction of the alternative.

4.3.2 Impacts of Alternative 1: No Action

Under the No Action Alternative, there would be no change to the MD 4/Suitland Parkway intersection; therefore, no wetland or surface water impacts would occur. Alternative 1 would result in no short- or long-term impacts to wetlands or surface waters.

Cumulative Impacts

Alternative 1 would have no short- or long-term impacts to wetlands or surface waters; therefore, this alternative would have no contribution to cumulative impacts to wetlands and surface waters.

Conclusion

The implementation of the No Action Alternative would have no short- or long-term impacts to wetlands or surface waters, and would therefore not contribute to cumulative impacts.

4.3.3 Impacts of Alternative 2: Diamond Roundabout Interchange

Temporary wetland impacts would be less than 0.1 acre. During construction, implementation of erosion and sediment control practices, such as installation of silt fence, sediment trapping or filtering, and other BMPs, would minimize temporary impacts to water quality, wetlands and surface waters. Alternative 2 would result in the addition of 1.6 acres of impervious surface within the boundary of Suitland Parkway. Stormwater quality and quantity would be treated as described in **Chapter 2**.

Construction activities would require grading and excavating of less than 0.1 acre of wetlands within the boundary of Suitland Parkway. No stream impacts would occur. Long-term impacts to the water quality of wetlands and surface waters would be addressed by the implementation of an MDE-approved SWM plan. The sum of activities comprising Alternative 2 would have short- and long-term minor adverse impacts to wetlands.

Cumulative Impacts

The project would contribute to long-term minor adverse cumulative effects to wetlands that would be expected as a result of past, present, and reasonably foreseeable actions occurring within the park and the Potomac River-Upper Tidal watershed and the Patuxent River – Western Branch watershed. Planned construction activities include the development of 6,000 acres immediately east of the project area associated with Westphalia and the planned redevelopment of 600 acres of JBA lands. Additionally, SHA and Prince George's County have planned MD 4 corridor improvements, including the construction of interchanges along MD 4 at Westphalia Road and Dower House Road. However, SE/SC plans, BMPs,

mitigation practices, and adherence to MDE SWM regulations would limit the disturbance to wetlands and surface waters within the watershed. Past, present, and reasonably foreseeable actions occurring within the project area and surrounding watershed areas would result in long-term minor adverse cumulative effects to wetlands and surface waters. These effects, in combination with long-term minor adverse impacts of Alternative 2, would contribute a long-term minor adverse cumulative impact on wetlands and surface waters within the watershed.

Conclusion

Construction of Alternative 2 would result in short- and long-term minor adverse impacts to wetlands and surface waters within the project area. When combined with the effect of other past, present, and reasonably foreseeable actions, the long-term minor adverse impacts of Alternative 2 would contribute to a long-term minor adverse cumulative impact on wetlands

4.3.4 Impacts of Alternative 3: Signalized Diamond Interchange with Directional Ramp

Similar to Alternative 2, during construction implementation of erosion and sediment control practices, such as installation of silt fence, sediment trapping or filtering, and other BMPs would minimize temporary impacts to water quality and wetlands. Construction activities associated with Alternative 3 would result in the temporary disturbance of less than 0.1 acre of wetlands. Alternative 3 would result in the addition of 2.9 acres of impervious surface within the boundary of Suitland Parkway. Stormwater quality and quantity would be treated as described in **Chapter 2**.

Similar to Alternative 2, any construction activities would require grading and excavation, impacting less than 0.1 acres of wetlands. No stream impacts would occur. MDE SWM regulations would be used to prepare and implement a plan to address long-term stormwater runoff. The sum of activities comprising Alternative 3 would have short- and long-term minor adverse impacts to wetlands.

Cumulative Impacts

As described under Alternative 2, past, present, and reasonably foreseeable actions occurring within the park and surrounding watershed areas would result in long-term minor adverse cumulative effects to wetlands. These effects, in combination with long-term minor adverse impacts of Alternative 3, would contribute a long-term minor adverse cumulative impact on wetlands.

Conclusion

Construction of Alternative 3 would result in short- and long-term minor adverse impacts to wetlands within the project area. When combined with the cumulative effect of past, present, and reasonably foreseeable actions, the long-term minor adverse impacts of Alternative 3 would contribute a long-term minor adverse cumulative impact on wetlands.

4.4 VEGETATION

4.4.1 Methodology and Assumptions

Impacts to vegetation are assessed based on the change in vegetation or removal of vegetation required for each alternative.

Study Area

The study area for vegetation is the NPS property between the MD 4 and Suitland Parkway intersection and where Allentown Road merges with Suitland Parkway.

Impact Thresholds

Negligible: There would be no impacts to native vegetation or some individual native plants could be impacted as a result of the alternative, but there would be no impact on native species population. The impacts would be on a small scale and imperceptible. No species of special concern would be impacted.

Minor: There would be some impact to individual native plants and a relatively minor portion of the species' population. Mitigation measures to offset adverse impacts, including special measures to avoid impacting species of special concern, could be required and would be effective.

Moderate: There would be some impact to individual native plants and a sizeable segment of the species' population over a relatively large area. Mitigation measures to offset adverse impacts could be extensive, but would likely be successful. There could be impacts to some species of special concern.

Major: There would be considerable impact on individual native plants, including species of special concern, and impact a relatively large area in and out of the project area. Mitigation measures to offset adverse impacts would be required and extensive, and success of the mitigation measures would not be guaranteed.

Duration: Short-term impacts occur in a timeframe equal to or less than the duration of construction for the alternative and long-term impacts would continue to occur following the completion of construction of the alternative.

4.4.2 Impacts of Alternative 1: No Action

Under the No Action Alternative, there would be no change to the MD 4/Suitland Parkway intersection; therefore, no change to natural vegetation within the Suitland Parkway boundary would occur. Alternative 1 would have no short-term or long-term impacts on vegetation.

Cumulative Impacts

Alternative 1 would have no direct impacts to vegetation; therefore, the alternative would have no contribution to cumulative impacts.

Conclusion

The No Action Alternative would result in no short-term or long-term impacts to vegetation within the project area. There also would be no cumulative impacts to vegetation.

4.4.3 Impacts of Alternative 2: Diamond Roundabout Interchange

Grading and excavation associated with Alternative 2 would result in the clearing of approximately 20.0 acres of vegetation, including grasses, shrubs, and 5.6 acres of forested area. During construction, protection measures and BMPs would be implemented to avoid impacts to park vegetation to the maximum extent possible.

The Maryland Forest Conservation Act requires a 1:1 replacement of impacted woodlands (DNR 1991); however, mitigation for forest impacts within the boundary of Suitland Parkway would exceed this threshold. Mitigation for forest impacts would occur through a landscaping plan to be developed for this alternative for approval by NPS and in consultation with MHT. The landscape plan would be implemented following construction of Alternative 2 and would guide re-vegetation of the construction area not occupied by roadway facilities (up to 18.4 acres). The landscape plan would also include the management of invasive species. The sum of activities comprising Alternative 2 would have short- and long-term moderate adverse impacts to vegetation.

Cumulative Impacts

Long-term moderate adverse cumulative effects to vegetation would be expected as a result of other past, present, and reasonably foreseeable actions occurring in conjunction with Alternative 2. Other planned construction activities include the development of 6,000 acres immediately east of the project area associated with Westphalia, and the planned redevelopment of 600 acres of JBA. Additionally, SHA and Prince George's County have planned improvements to the MD 4 corridor at the MD 4 intersections with Dower House Road and Westphalia Road. BMPs, vegetation protection measures, tree save plans, and adherence to the Maryland Forest Conservation Act requiring a 1:1 replacement of impacted woodlands would limit the loss of vegetated areas within the Potomac River-Upper Tidal watershed and the Patuxent River – Western Branch watershed. Therefore, impacts to vegetation resulting from past, present, and future actions, in combination with the long-term moderate adverse impacts of Alternative 2, would contribute a long-term moderate adverse cumulative impact to vegetation within the watershed.

Conclusion

Construction of Alternative 2 would result in short- and long-term moderate adverse impacts to vegetation. When combined with the cumulative effects of past, present, and reasonably foreseeable actions, the long-term moderate adverse impacts of Alternative 2 would contribute a long-term moderate adverse cumulative impact on vegetation.

4.4.4 Impacts of Alternative 3: Signalized Diamond Interchange with Directional Ramp

Similar to Alternative 2, grading and excavation associated with Alternative 3 would result in the clearing of approximately 20.7 acres of vegetation, including grasses, shrubs, and approximately 4.7 acres of forested area. Protection measures and BMPs would be implemented during construction to avoid impacts to park vegetation to the maximum extent possible.

The Maryland Forest Conservation Act requires a 1:1 replacement of impacted woodlands (DNR 1991); however, mitigation for forest impacts within the boundary of Suitland Parkway would exceed this threshold. Mitigation for forest impacts would occur through a landscaping plan to be developed for this alternative for approval by NPS and in consultation with MHT. The landscape plan would be implemented following construction of Alternative 3 and would guide re-vegetation of the construction area not occupied by pavement (17.8 acres). A draft landscape plan for this alternative was submitted to NPS staff for review in May 7, 2014. Under this plan, 5.5 acres of afforestation and reforestation would occur on NPS lands. The landscape plan would also include the management of invasive species. The

sum of activities comprising Alternative 3 would have short- and long-term moderate adverse impacts to vegetation.

Cumulative Impacts

Past, present, and reasonably foreseeable actions occurring within the park and watershed would result in long-term minor adverse cumulative effects to vegetation. These effects, in combination with the long-term minor adverse impacts of Alternative 3, would contribute a long-term minor adverse cumulative impact on vegetation.

Conclusion

Construction of Alternative 3 would result in short- and long-term minor adverse impacts to vegetation within the project area. When combined with the cumulative effects of past, present, and reasonably foreseeable actions; the long-term minor adverse impacts of Alternative 3 would contribute a long-term minor adverse cumulative impact on vegetation.

4.5 WILDLIFE

4.5.1 Methodology and Assumptions

Potential wildlife impacts are based on the likelihood for species to use the area near the alternative improvements, and the loss of habitat associated with construction of the alternatives.

Study Area

The study area for wildlife is the NPS property between the MD 4 and Suitland Parkway intersection and where Allentown Road merges with Suitland Parkway. The impacts are calculated from the land required to implement the alternatives.

Impact Thresholds

Negligible: There would be no observable or detectable impacts to native species, their habitats, or the natural processes sustaining them, and they would be well within the natural range of variability.

Minor: There would be detectable impacts to native species, their habitats, or the natural processes sustaining them, but they would not be outside the natural range of variability. Any needed mitigation measures to offset adverse impacts would be simple and successful.

Moderate: There would be detectable impacts to native species, their habitats, or the natural processes sustaining them, and they could be outside the natural range of variability. Animals of concern and in vulnerable life stages (migration or juvenile stages) are present. Interference with activities necessary for survival may occasionally occur, but it is not expected to threaten the existence of the species in the project area. Any needed mitigation measures to offset adverse impacts would be extensive and likely successful.

Major: There would be detectable impacts to native species, their habitats, or the natural processes sustaining them, and they would be outside the natural range of variability. Variability of some native species could be affected by loss of habitat and some key ecosystem processes could be disrupted.

Extensive mitigation measures would be needed to offset any adverse impacts and their success would not be guaranteed.

Duration: Short-term impacts occur in a timeframe equal to or less than the duration of construction for the alternative and long-term impacts would continue to occur following the completion of construction of the alternative.

4.5.2 Impacts of Alternative 1: No Action

Under the No Action Alternative, there would be no change to existing factors that impact wildlife within the Suitland Parkway boundary. There would be no improvements to the MD 4/Suitland Parkway intersection, and therefore no wildlife impacts would occur from loss of habitat. This alternative would result in no additional impacts to wildlife.

Cumulative Impacts

Alternative 1 would have no direct impacts to vegetation; therefore, there would be no contribution to cumulative impacts.

Conclusion

The No Action Alternative would result in no short- or long-term impacts to wildlife, and would not contribute to cumulative effects to wildlife.

4.5.3 Impacts of Alternative 2: Diamond Roundabout Interchange

Temporary disturbances during construction of Alternative 2 would have short-term impacts on terrestrial species and their habitat. The temporary construction-related disturbances could cause species to relocate to similar suitable habitats in the area. Alternative 2 would also result in the permanent disturbance of 5.6 acres of forested habitat and less than 0.1 acre of wetland habitat. Species inhabiting the areas of permanent disturbance would be permanently displaced, but given the relatively small area of disturbance, would likely reestablish themselves following construction in adjacent areas of sufficient habitat. Additionally, re-vegetation in accordance with approved landscape plans would, upon maturity, provide sufficient food and shelter for the reestablishment of some species within the project area. Therefore, Alternative 2 would have short- and long-term minor adverse impacts to wildlife.

Cumulative Impacts

Long-term minor adverse cumulative effects to wildlife would be expected as a result of other past, present, and reasonably foreseeable actions occurring in conjunction with Alternative 2. Other planned construction activities, which could affect wildlife, include the development of 6,000 acres immediately east of the project area associated with Westphalia and the planned redevelopment of 600 acres of JBA. Additionally, SHA and Prince George's County have planned improvements to the MD 4 Corridor. These improvements would occur at the MD 4 intersections with Westphalia Road and Dower House Road. Particularly for the planned Westphalia development, construction activities would likely result in permanent displacement of wildlife from their habitats. Although some species would relocate and reestablish populations in other nearby habitat, the permanent loss of habitat associated with Westphalia would be much larger than disturbance associated with the MD 4/Suitland Parkway improvements.

Therefore the project would have a long-term minor adverse cumulative effect to wildlife habitat, when considered in combination with other past, present, and reasonably foreseeable actions.

Conclusion

Alternative 2 would result in short- and long-term minor adverse impacts to wildlife within the project area. When combined with the cumulative effect of past, present, and reasonably foreseeable actions, the long-term minor adverse impacts of Alternative 2 would contribute a long-term minor adverse cumulative impact on wildlife.

4.5.4 Impacts of Alternative 3: Signalized Diamond Interchange with Directional Ramp

Temporary disturbances during construction of Alternative 3 would have short-term impacts on terrestrial species and their habitat. The temporary construction-related disturbances could cause species to relocate to similar suitable habitats in the area. Alternative 3 would also result in the disturbance of 4.7 acres of forested habitat and less than 0.1 acre of wetland habitat. Species inhabiting the areas of permanent disturbance would be permanently displaced, but given the relatively small area of disturbance, would likely reestablish themselves following construction in adjacent areas of sufficient habitat. Additionally, re-vegetation in accordance with approved landscape plans would, upon maturity, provide sufficient food and shelter for the reestablishment of some species within the project area. Therefore, Alternative 3 would have short- and long-term minor adverse impacts to wildlife.

Cumulative Impacts

As described under Alternative 2, past, present, and reasonably foreseeable actions occurring within the park and surrounding areas would result in long-term minor adverse cumulative effects to wildlife. Therefore, Alternative 3 would have a long-term minor adverse cumulative effect to wildlife habitat, when considered in combination with other past, present, and reasonably foreseeable actions.

Conclusion

Construction of Alternative 3 would result in short- and long-term minor adverse impacts to wildlife within the project area. When combined with the cumulative effect of past, present, and reasonably foreseeable actions, the long-term minor adverse impacts of Alternative 3 would contribute a long-term minor adverse cumulative impact on wildlife.

4.6 HISTORIC STRUCTURES AND DISTRICTS

Federal actions that have the potential to affect cultural resources are subject to a variety of laws and regulations. The NHPA is the principal legislation for managing cultural resources associated with NPS projects. Generally, Section 106 of the NHPA requires all federal agencies to consider the effects of their actions on cultural resources listed and/or determined eligible for listing in the NRHP. Such resources are termed “historic properties”. If the federal agency, in consultation with the SHPO and additional consulting parties, determines that an undertaking will have an adverse effect, then agreement on mitigation of the adverse effects is sought through further consultation. Section 110 of the NHPA also charges federal agencies with responsibility for establishing preservation programs for the identification, evaluation, and nomination of historic properties to the NRHP. Compliance with the NHPA Section 106 is being completed as a separate process, parallel to the completion of this EA.

The NPS is charged with the protection and management of cultural resources in its custody. This is furthered through the implementation of DO-28 (NPS 1998), *NPS Management Policies*, and the 1995 Servicewide Programmatic Agreement with the ACHP and the National Conference of State Historic Preservation Officers. These documents charge NPS managers with avoiding, or minimizing to the greatest degree practicable, adverse impacts on park resources and values.

The term “historic resources” refers to buildings, structures, objects, above-ground sites, and districts listed on, or eligible for, listing on the NRHP. In order for a historic resource to be listed on the NRHP, it must be associated with an important historic context. In other words, it must possess significance — the meaning or value ascribed to the historic resource — *and* retain the integrity of those character-defining features necessary to convey its significance (i.e., location, design, setting, workmanship, materials, feeling, and association; see National Register Bulletin #15, *How to Apply the National Register Criteria for Evaluation*; NPS 1995a). Impact analyses under NEPA and Section 106 examine the manner and degree to which the proposed alternatives impact or affect the qualities and integrity of the individual historic resource’s character-defining features, significance, and NRHP eligibility.

4.6.1 Methodology and Assumptions

Impacts to historic properties are being considered under a separate process pursuant to Section 106 of the NHPA. Under that process, a determination of either *adverse effect* or *no adverse effect* must be made for affected historic properties. An adverse effect occurs whenever an impact alters, directly or indirectly, any characteristic of a cultural resource that qualifies it for inclusion in the NRHP (for example, diminishing the integrity of the resource’s location, design, setting, materials, workmanship, feeling, or association). Adverse effects also include reasonably foreseeable effects caused by the proposed alternative that would occur later in time, be farther removed in distance, or be cumulative (36 CFR 800.5). A determination of *no adverse effect* means there is either no effect or the effect would not diminish, in any way, the characteristics of the cultural resource that qualify it for inclusion in the NRHP. Results of the Section 106 process are referenced and summarized in this EA.

The CEQ regulations and NPS DO-12 also call for a discussion of the appropriateness of mitigation, as well as an analysis of how effective the mitigation would be in reducing the intensity of a potential impact, e.g. reducing the intensity of an impact from major to moderate or minor. Any resultant reduction in intensity of impact due to mitigation, however, is an estimate of the effectiveness of mitigation under NEPA only. Cultural resources are non-renewable resources and adverse effects generally consume, diminish, or destroy the original historic materials or form, resulting in a loss in the integrity of the resource that can never be recovered. Therefore, although actions determined to have an adverse effect under Section 106 may be mitigated, the effect remains adverse.

The NPS guidance for evaluating impacts, DO-12 (NPS 2001a), requires that impact assessment be scientific, accurate, and quantified to the extent possible. For cultural resources, it is seldom possible to measure impacts in quantifiable terms; therefore, impact thresholds must rely heavily on the professional judgment of resource experts.

Study Area

An APE was identified in consultation with MHT. The APE is the defined study area for the analysis of impacts to historic properties.

Impact Thresholds

Negligible: The impact is at the lowest level of detection with neither adverse nor beneficial consequences.

Minor: Alteration of pattern(s) or feature(s) of a historic property listed in, or eligible for, the NRHP would not diminish the integrity of a character-defining feature(s) or the overall integrity of the historic property.

Moderate: The impact would alter a character-defining feature(s) of a historic district or structure, but would not diminish the integrity of the resource to the extent that its NRHP eligibility would be jeopardized.

Major: The impact would alter a character-defining feature(s) of the historic resource, diminishing the integrity of the resource to the extent that it may no longer be eligible for listing on the NRHP.

Duration: All impacts to historic structures and districts are considered long-term.

4.6.2 Impacts of Alternative 1: No Action

Under the No Action Alternative, there would be no improvements to the intersection of MD 4 and Suitland Parkway. No change to the eastern terminus of Suitland Parkway or its boundary would occur. The NPS and SHA would continue to complete minor roadway repairs necessary to maintain the integrity of the existing roadways and intersection, including repairs to the contributing elements of the Suitland Parkway Historic District. No short- or long-term impacts to historic structures or districts would occur.

Cumulative Impacts

No additional projects were identified that would result in other cumulative impacts to historic structures and districts. Alternative 1 would have no long-term beneficial or adverse impacts to historic structures and districts; therefore, this alternative would not contribute to beneficial or adverse cumulative impacts.

Conclusion

The No Action Alternative would result in no long-term beneficial or adverse impacts to historic structures or districts, and no beneficial or adverse cumulative impacts to historic structures or districts.

4.6.3 Impacts of Alternative 2: Diamond Roundabout Interchange

Alternative 2 would require grading and excavation to raise the profile of Suitland Parkway as it approaches MD 4. Construction would include installation of additional roadway pavement to provide ramp access to southbound MD 4 from eastbound Suitland Parkway and to westbound Suitland Parkway from southbound MD 4. Construction of these ramps, as well as the proposed roundabout to the west of the MD 4 overpass, would require a land transfer of approximately 10.9 acres from NPS to SHA. This would result in a permanent impact to the boundary of the Suitland Parkway Historic District. The MHT

concluded that this alternative would have an *adverse effect* on Suitland Parkway on March 6, 1998 (**Appendix C**) and entered into a MOA in 1999 with SHA, NPS, and FHWA to address adverse effects. Mitigation measures stipulated in the MOA include: an interchange design commensurate with a symbolic entrance to Washington D.C., roundabouts at each end of the overpass, the construction of low stone walls, a distinctive bridge design, appropriate landscaping including reforestation, timber or stone guardrails, minimal signage at the roundabouts, and signage compatible with the NPS standards for size and color.

Pursuant to Section 106, Alternative 2 would have an *adverse effect* to Suitland Parkway; however, the alternative would not result in Suitland Parkway being removed from listing on the NRHP. Impacts would occur at the eastern terminus of the 9.2 mile long Suitland Parkway. Impacts to vegetation, hardscape, and aesthetics would be mitigated for in accordance with the MOA, approved by NPS, FHWA, SHA, and MHT in 1999. Therefore, this alternative would have a long-term moderate adverse impact to the Suitland Parkway Historic District. The adverse effects would be addressed through stipulations outlined in the 1999 MOA.

Cumulative Impacts

No additional projects were identified in the project vicinity that would cause cumulative impacts to historic structures and districts. Therefore, the direct effects from Alternative 2 would not contribute to cumulative impacts.

Conclusion

The construction of the interchange under Alternative 2 would result in a long-term moderate adverse impact to the Suitland Parkway Historic District, but would have no other contribution to cumulative impacts.

4.6.4 Impacts of Alternative 3: Signalized Diamond Interchange with Directional Ramp

Alternative 3 would require grading and excavation to raise the profile of Suitland Parkway as it approaches MD 4. Construction would include installation of additional roadway pavement to provide ramp access to southbound MD 4 from eastbound Suitland Parkway and construction of a directional ramp providing access to westbound Suitland Parkway from northbound MD 4. Additionally, the profile of Suitland Parkway would be widened to four lanes as it approaches the MD 4 overpass. This widening would require the reconstruction of the south side of the Suitland Parkway Bridge over the entrance to the JBA North Gate, a contributing resource to the Suitland Parkway Historic District. Construction would require a land transfer of 6.9 acres from NPS to SHA. This would result in a permanent impact to the boundary of the Suitland Parkway Historic District. Per consultation with MHT, dated March 31, 2010, Alternative 3 would result in an *adverse effect*. Presently, a MOA is being drafted for execution by NPS, FHWA, MHT, and SHA. The draft MOA outlines measures to mitigate for adverse effects to Suitland Parkway, which include: salvaging and reusing the historic stone cladding from the North Gate Bridge; matching the color and texture of the mortar used on the south side of the bridge to the original; using a mason with at least five years of experience repointing historic masonry bridges; using a stone and mortar bonding pattern on the exterior of the parapets and abutments of the directional ramps that is similar to the pattern on the Suitland Parkway Bridge. The SHA has acquired 12.8 acres of land adjacent to Fort Foote. Following execution of the draft MOA, this land would be transferred to NPS as detailed in **Chapter 2**.

Pursuant to Section 106, Alternative 3 would have *an adverse effect* to Suitland Parkway; however, the alternative would not result in Suitland Parkway being removed from listing on the NRHP. Impacts would occur at the eastern terminus of the 9.2 mile long Suitland Parkway. Alternative 3 would require the reconstruction of the North Gate Bridge; however, reconstruction would be completed in accordance with the aforementioned draft MOA, to be approved by NPS, FHWA, MHT, and SHA. Impacts to vegetation, hardscape, and aesthetics would also be mitigated for in accordance with the draft MOA. Therefore, this alternative would have a long-term moderate adverse impact to the Suitland Parkway Historic District. The adverse effects would be addressed through stipulations outlined in the draft MOA currently being developed.

Cumulative Impacts

No additional projects were identified in the project vicinity that would cause cumulative impacts to historic structures and districts. Therefore, the direct effects from Alternative 3 would not contribute to cumulative impacts.

Conclusion

The construction of the interchange under Alternative 3 would result in a long-term moderate adverse impact to the Suitland Parkway Historic District. The direct effects from Alternative 3 would not contribute to cumulative impacts.

4.7 CULTURAL LANDSCAPES

4.7.1 Methodology and Assumptions

The impact analysis in this section was prepared pursuant to the requirements of NEPA. A cultural landscape is defined as a “geographic area (including both cultural and natural resources and the wildlife or domestic animals therein) associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values” (NPS, 1992). No CLI has been completed for Suitland Parkway; however structures identified as contributing resources to the historic district along with the landscape elements, described herein, culminate in the cultural landscape that defines Suitland Parkway.

Study Area

An APE for project was identified in consultation with MHT. The APE is the defined study area for the analysis of impacts to historic properties.

Impact Thresholds

Negligible: The impact is at the lowest level of detection with neither adverse nor beneficial consequences.

Minor: The impact would not diminish the integrity of a character-defining feature(s) or the overall integrity of the cultural landscape.

Moderate: The impact would alter a character-defining feature(s) of a cultural landscape. It would also diminish the overall integrity of that feature(s) of the cultural landscape.

Major: The impact would alter a character-defining feature(s) of a cultural landscape. It would also severely diminish the integrity of that feature(s) and the overall integrity of the cultural landscape of the historic property.

Duration: All impacts to cultural landscapes are considered long-term.

4.7.2 Impacts of Alternative 1: No Action

Traffic volumes would increase as projected as a result of continued development along the MD 4 corridor and the redevelopment of JBA. Overtime, the increase in traffic volumes would decrease Suitland Parkway's utility and ability to move traffic efficiently. However, there would be no change to views or vegetation within the cultural landscape of Suitland Parkway. Further, the hardscape features of the landscape, such as walls, culverts, and bridges, would remain unchanged. Therefore, Alternative 1 would result in long-term negligible adverse impacts to the cultural landscape.

Cumulative Impacts

No additional projects were identified in the project area vicinity that would result in impacts to cultural landscapes. Therefore, although Alternative 1 would have a long-term negligible adverse impact to cultural landscapes, there would be no contribution to cumulative impacts.

Conclusion

The No Action Alternative would result in negligible impacts to the cultural landscape of Suitland Parkway. There would be no cumulative impacts.

4.7.3 Impacts of Alternative 2: Diamond Roundabout Interchange

Alternative 2 would elevate the profile of Suitland Parkway over MD 4. Construction would include ramps to southbound MD 4 from eastbound Suitland Parkway and to westbound Suitland Parkway from southbound MD 4. These ramps as well as the proposed roundabout on the west side of the MD 4 overpass would introduce new hardscape features within the cultural landscape, including new roadway pavement for the roundabout. Alternative 2 would also introduce new slopes on the approach to the MD 4 overpass, modify the median areas, and clear existing vegetation in the project area. The use of compatible materials and installation of landscaping, in accordance with an NPS- and MHT-approved landscaping plan, as coordinated through the 1999 MOA, would minimize effects on the cultural landscape. The alternative would result in long-term moderate adverse impacts to the cultural landscape of Suitland Parkway.

Cumulative Impacts

No additional projects were identified in the project vicinity that would result in impacts to cultural landscapes. Therefore, although Alternative 2 would have a long-term moderate adverse impact to cultural landscapes, there would be no contribution to cumulative impacts.

Conclusion

The construction of the interchange under Alternative 2 would result in a long-term moderate adverse impact to the cultural landscape, but would have no other contribution to cumulative impacts.

4.7.4 Impacts of Alternative 3: Signalized Diamond Interchange with Directional Ramp

Alternative 3 would widen the profile of Suitland Parkway. The westbound lanes would be widened from two to four lanes and the profile would be elevated over MD 4. Construction would include installation of additional pavement, providing ramp access to southbound MD 4 from eastbound Suitland Parkway and construction of an elevated directional ramp providing access to westbound Suitland Parkway from northbound MD 4. Alternative 3 would also introduce new slopes on the approach to the MD 4 overpass, modify the median areas, and clear existing vegetation in the project area. The new ramps and widened pavement would introduce new hardscape within the cultural landscape of Suitland Parkway. The directional ramp would affect views from Suitland Parkway east and north, as the ramp crosses over Presidential Parkway, MD 4, and the northbound access road exiting JBA North Gate. The views exiting the JBA North Gate would be impacted by the reconstruction of the Suitland Parkway Bridge over the entrance ramp to JBA North Gate; however, reconstruction as outline in the draft MOA would minimize the perception of this impact to the lay visitor. The use of compatible materials on new hardscape and installation of landscaping in accordance with an NPS- and MHT-approved landscaping plan would minimize effects on the cultural landscape. This alternative would result in long-term moderate adverse impacts to the cultural landscape of Suitland Parkway.

Cumulative Impacts

No additional projects were identified in the project area vicinity that would result in impacts to cultural landscapes. Therefore, although Alternative 3 would have a long-term moderate adverse impact to cultural landscapes, there would be no contribution to cumulative impacts.

Conclusion

Alternative 3 would result in long-term moderate adverse impacts to the cultural landscape, but would have no contribution to cumulative impacts.

4.8 VISITOR USE AND EXPERIENCE

4.8.1 Methodology and Assumptions

Potential impacts to visitor use and experience were assessed by considering the impacts of the existing conditions and the project alternatives on the experience of those who travel Suitland Parkway.

Study Area

The study area for the evaluation of potential effects to visitor use and experience encompasses the project area within the boundary of Suitland Parkway.

Impact Thresholds

Negligible: There would be no noticeable changes or the change would be below, or at the level of, detection. The visitor would be unlikely to notice any impacts.

Minor: There would be slight yet detectable changes in visitor use and/or experience. The changes would not noticeably limit or enhance critical characteristics of the visitor experience. The visitor would be aware of the impacts, but the effects would be slight.

Moderate: There would be readily apparent changes in visitor use and/or experience and few critical characteristics of the desired visitor experience would change. Visitor satisfaction would begin to either decline or increase.

Major: There would be readily apparent changes in visitor use and/or experience and multiple critical characteristics of the desired visitor experience would change. Visitor satisfaction would markedly decline or increase.

Duration: Short-term impacts occur in a timeframe equal to, or less than, the duration of construction for the alternative and long-term impacts would continue to occur following the completion of construction of the alternative.

4.8.2 Impacts of Alternative 1: No Action

Under the No Action Alternative, there would be no change to aesthetic characteristics of the current MD 4/Suitland Parkway intersection. However, because there would be no improvements to the existing MD 4/Suitland Parkway intersection, existing congestion at the intersection would continue and future projected increases in traffic volume would not be accommodated, resulting in a substantial increase in travel delays. Alternative 1 would have no short-term impacts to visitor use and experience; however, increasing congestion and travel delays as detailed in the discussion of transportation impacts (**Chapter 4.9**) would result in a long-term moderate adverse impact to the visitor use and experience.

Cumulative Impacts

In the project vicinity, Suitland Parkway is the only NPS-owned or publicly-owned property to which visitor use and experience is applicable. There are no other planned projects that would affect visitor use and experience of Suitland Parkway. Therefore, Alternative 1 would not contribute to cumulative effects.

Conclusion

The implementation of the No Action Alternative would have no short-term impacts, but would result in long-term moderate adverse impacts to visitor use and experience of Suitland Parkway. The project would not contribute to cumulative impacts on visitor use and experience.

4.8.3 Impacts of Alternative 2: Diamond Roundabout Interchange

Alternative 2 would result in the temporary disturbance of the visitor experience within Suitland Parkway. Construction activities would last approximately four years. Detours for some direction movements within the project area would be necessary. Delays caused by lane closures and detours are also likely to occur within the project area. Temporary visual impacts could result from equipment and clearing of vegetation. Suitland Parkway users would be notified of changes in traffic patterns as well as road closures by public notification, and construction equipment would be used in a manner that causes the least disturbance to Parkway users. Following construction, re-vegetation would occur in accordance with an approved landscape plan. Aesthetic treatments would include the construction of low stone walls, a distinctive bridge design, the use of timber or stone guardrails, minimal signage, and signage compatible with the NPS standards for size and color. Re-vegetation and aesthetic treatments would minimize impacts to the viewshed of Suitland Parkway and the visitor experience. However, the proposed diamond roundabout interchange would continue to operate at an unacceptable LOS and experience significant

delay as detailed in the discussion of Transportation impacts (**Chapter 4.9**), resulting in adverse effects to the utility of the Parkway. Therefore, Alternative 2 would have short- and long-term minor adverse impacts to visitor use and experience.

Cumulative Impacts

In the project vicinity, Suitland Parkway is the only NPS-owned or publicly-owned property to which visitor use and experience is applicable. There are no other planned projects that would affect visitor use and experience of Suitland Parkway. Therefore, Alternative 2 would not contribute to cumulative effects.

Conclusion

Construction of Alternative 2 would result in short- and long-term minor adverse impacts to visitor use and experience. The project would not contribute to cumulative impacts upon visitor use and experience.

4.8.4 Impacts of Alternative 3: Signalized Diamond Interchange with Directional Ramp

Alternative 3 would result in the temporary disturbance of the visitor experience within Suitland Parkway. Construction activities would last approximately four years. Detours for some directional movements within the project area would be necessary. Delays caused by lane closures and detours are also likely to occur within the project area. Temporary visual impacts could result from equipment and clearing of vegetation. Suitland Parkway users would be notified of changes in traffic patterns as well as road closures by public notification, and construction equipment would be used in a manner that causes the least disturbance to Parkway users. Following construction, re-vegetation would occur in accordance with an approved landscape plan. Aesthetic treatments would include salvaging and reusing the historic stone cladding from the North Gate Bridge; the use of stone and a mortar bonding pattern on the exterior of the parapets and abutments of the directional ramps, minimal signage, and signage compatible with the NPS standards for size and color. Re-vegetation and aesthetic treatments would minimize impacts to the viewshed of Suitland Parkway and the visitor experience. Additionally, the proposed signalized diamond interchange with directional ramp would be able to accommodate future traffic volumes, thus improving travel efficiency and preserving the Parkway utility for drivers. Therefore, Alternative 3 would have short-term minor adverse impacts to the visitor use and experience followed by a long-term benefit to visitor use and experience.

Cumulative Impacts

In the project vicinity, Suitland Parkway is the only NPS-owned or publicly-owned property to which visitor use and experience is applicable. There are no other planned projects that would affect visitor use and experience of Suitland Parkway. Therefore, Alternative 3 would not contribute to cumulative effects

Conclusion

Construction of Alternative 3 would result in short-term minor adverse impacts and long-term benefits to visitor use and experience of Suitland Parkway. Alternative 3 would not contribute to cumulative impacts.

4.9 TRANSPORTATION

4.9.1 Methodology and Assumptions

Potential impacts to transportation were assessed by considering the existing conditions and impacts of each alternative on traffic operations and ease of travel in the project area.

Study Area

The study area for the evaluation of transportation impacts includes the eastern terminus of Suitland Parkway, access roads to the JBA North Gate, Old Marlboro Pike as it accesses Suitland Parkway, and the MD 4 corridor.

Impact Thresholds

Negligible: Any change to travel time, convenience, or benefit would not be perceptible/barely perceptible to travelers in the project area.

Minor: The change to travel time, convenience, or benefit would be noticeable to a small number of travelers in the project area. However, the effect would be slight.

Moderate: The change in travel time, convenience, or benefit would be noticeable for a large number of travelers in the project area.

Major: The change in travel time, convenience, or benefit would be substantial and highly noticeable for a large number of travelers in the project area.

Duration: Short-term impacts occur in a timeframe equal to or less than the duration of construction for the alternative and long-term impacts would continue to occur following the completion of construction of the alternative.

4.9.2 Impacts of Alternative 1: No Action

Under the No Action Alternative, there would be no improvements to the intersection of MD 4 and Suitland Parkway. Transportation service would continue to deteriorate at the eastern terminus of the Suitland Parkway as traffic volumes increase as projected. Lengthy queues and delays would continue to occur along Suitland Parkway and MD 4 (**Table 5**). This alternative would have a long-term major adverse impact to transportation.

Cumulative Impacts

Long-term minor cumulative impacts to transportation would be expected as a result of past, present, and reasonably foreseeable actions occurring in the project vicinity. SHA and Prince George's County have planned other MD 4 corridor improvements, including at the MD 4 intersections with Westphalia Road and Dower House Road. The construction of these interchanges would help alleviate traffic congestion on MD 4; however, the Suitland Parkway intersection would continue to experience inefficient traffic operations and long travel delays, which would have a negative impact on the entire transportation network. Therefore, the project would have a long-term major adverse cumulative impact upon transportation when considered in conjunction with other past, present, and future actions.

Conclusion

The No Action Alternative would result in a long-term major adverse impact to transportation. Alternative 1 would also have a long-term major adverse cumulative impact when combined with other past, present, and reasonably foreseeable actions.

4.9.3 Impacts of Alternative 2: Diamond Roundabout Interchange

Construction activities associated with Alternative 2 would result in short-term minor impacts to transportation. Construction activities would last approximately four years. Detours for some directional movements within the project area would be necessary. Delays caused by lane closures and detours are also likely to occur within the project area. A plan to maintain traffic and minimize impacts to drivers during construction would be developed to mitigate these short-term adverse impacts. Drivers would be notified of changes in traffic patterns as well as road closures by public notification, and construction would be staged in a manner that would cause the least traffic disturbance reasonable.

As described in **Chapter 1.3**, a VE study conducted in October 2004 found that changes in zoning by Prince George's County for the area surrounding the intersection of Suitland Parkway and MD 4 required revisions of the traffic forecasts used to design the FONSI Selected Alternative diamond roundabout interchange (Alternative 2 in this EA). Based on updated traffic projections, the VE study team concluded that the two roundabouts that allowed traffic to move across the bridge and access the ramps and the parkways would, upon opening, operate at a failing level of service during the morning and evening peak hours. Delays on MD 4 and Suitland Parkway would be reduced on comparison to the No Action Alternative; however, they would still be lengthy and extend on to Suitland Parkway and MD 4 (**Table 5**). Therefore, Alternative 2 would have long-term moderate adverse impacts to transportation.

Cumulative Impacts

Long-term minor cumulative impacts to transportation would be expected as a result of past, present, and reasonably foreseeable actions occurring in the project vicinity. SHA and Prince George's County have planned other MD 4 corridor improvements, including at the MD 4 intersections with Westphalia Road and Dower House Road. The construction of these interchanges would help alleviate traffic congestion on MD 4; however, the Suitland Parkway interchange proposed with Alternative 2 would continue to experience inefficient traffic operations and long travel delays, which would contribute to a negative impact on the entire transportation network in the project area. Although less adverse than the No Action Alternative, the project would have a long-term minor adverse cumulative impact upon transportation when considered in conjunction with other past, present, and future actions.

Conclusion

Construction of Alternative 2 would result in short-term minor and long-term moderate adverse impacts to transportation within the project area. When combined with other past, present, and reasonably foreseeable actions, Alternative 2 would contribute to long-term minor adverse cumulative impacts on transportation.

4.9.4 Impacts of Alternative 3: Signalized Diamond Interchange with Directional Ramp

Construction activities associated with Alternative 2 would result in short-term minor impacts to transportation. Construction activities would last approximately four years. Detours for some directional

movements within the project area would be necessary. Delays caused by lane closures and detours are also likely to occur within the project area. A plan to maintain traffic and minimize impacts to drivers during construction would be developed to mitigate these short-term adverse impacts. Drivers would be notified of changes in traffic patterns as well as road closures by public notification, and construction would be staged in a manner that would cause the least traffic disturbance reasonable.

Following construction, Alternative 3 would result in a beneficial effect on transportation. Function and operation would be improved by increased mobility afforded with the channelized right-turn lane from eastbound Suitland Parkway onto southbound MD 4 and a two-lane directional ramp carrying traffic from northbound MD 4 to westbound Suitland Parkway. Delays would be greatly reduced in comparison to the No Action Alternative (**Table 5**). Additionally, pedestrian and bike mobility through and around the interchange would be greatly improved. Therefore, Alternative 3 would have short-term minor adverse impacts and a long-term benefit to transportation.

Cumulative Impacts

Long-term minor cumulative impacts to transportation would be expected as a result of past, present, and reasonably foreseeable actions occurring in the project vicinity. SHA and Prince George's County have planned other MD 4 Corridor improvements, including at the MD 4 intersections with Westphalia Road and Dower House Road. The construction of these interchanges, in conjunction with the improvements to Suitland Parkway proposed with Alternative 3, would alleviate traffic congestion on MD 4 and on Suitland Parkway. This would result in a cumulative long-term benefit to transportation.

Conclusion

Construction of Alternative 3 would result in short-term minor adverse and long-term benefits to transportation within the project area. When combined with the cumulative effects of past, present, and reasonably foreseeable actions, Alternative 3 would contribute to a long-term cumulative benefit on transportation.

Table 5: Projected 2030 Operational Analysis Results

	Morning Peak Period Delay		Evening Peak Period Delay	
	Seconds	Minutes	Seconds	Minutes
Alternative 1: No Action Alternative				
Suitland Parkway Eastbound	1,188	19.8	808	13.5
Suitland Parkway Westbound	901	15.0	1,004	16.7
MD 4 Northbound	943	15.7	565	9.4
MD 4 Southbound	761	12.7	1,040	17.3
Overall	927	15.5	868	14.5
Alternative 2: Diamond Roundabout Interchange				
Suitland Parkway at MD 4 Southbound Ramps – West Roundabout	360	6.0	255	4.3
Suitland Parkway at MD 4 Northbound Ramps - East Roundabout	314	5.1	4	< 0.1
Alternative 3: Signalized Diamond Interchange with Directional Ramp				
Suitland Parkway at MD 4 Southbound Ramps				
Eastbound	159	2.7	113	1.9
Westbound	107	1.8	121	2.0
Southbound	154	2.6	253	4.2
Overall	140	2.3	131	2.9
Suitland Parkway at MD 4 Northbound Ramps				
Eastbound	31	0.5	25	0.4
Westbound	16	0.3	137	2.3
Northbound	1	< 0.1	2	< 0.1
Overall	22	0.4	86	1.4

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CHAPTER 5: CONSULTATION AND COORDINATION

Coordination with state and federal agencies was conducted during the planning and NEPA process to identify issues and/or concerns related to natural and cultural issues potentially impacted by the undertaking.

5.1 SECTION 7 CONSULTATION

In accordance with Section 7 of the Endangered Species Act of 1973, the SHA solicited comments from the USFWS and DNR as it relates to known occurrences of rare, threatened, and endangered species within the proposed project area that would be adversely impacted by the project. A DNR letter dated May 2, 2012 and online USFWS certification dated April 2, 2012 confirmed that no federal or state listed species of concern were identified within the project area. The response letters are provided in **Appendix A**.

5.2 SECTION 106 CONSULTATION

In accordance with Section 106 of the NHPA, SHA has coordinated with MHT throughout their planning study. In a letter dated December 16, 1997, the SHA determined that the diamond roundabout interchange design (Alternative 2) would have an *adverse effect* on historic properties. MHT concurred with this determination of March 6, 1998 and an MOA to mitigate for the *adverse effect* to Suitland Parkway was executed August, 1999. In a letter dated March 31, 2010, SHA coordinated the signalized diamond interchange design (Alternative 3); efforts to determine the area of potential effects; the identification of historic properties within the area of potential effects; a determination of effects to historic properties; and minimization and mitigation measures being included in the project design. By carbon copy, Prince George's County Historic Preservation Commission, Prince George's Heritage, Inc., and the NPS were invited to provide comments and participate in the consultation process. In correspondence dated June 9, 2010, MHT concurred with SHA's finding that the project would have an *adverse effect* and requested execution of a new MOA to outline mitigation for adverse effects to historic resources. In a letter dated April 11, 2013, SHA coordinated the proposed property acquisition of 8801 Fort Foote Road with MHT. The MHT concurred that this property acquisition would not constitute an additional adverse effect on May 8, 2013. A draft MOA was submitted to MHT, NPS National Capital Region, and NPS-NACE on June 25, 2013. By letter dated July 13, 2013, FHWA notified ACHP of the project and *adverse effect* determination; by letter dated July 26, 2013, ACHP responded that their participation in the consultation to resolve adverse effects is not needed. The draft MOA was further revised and distributed MHT and NPS May 27, 2014 for final review prior to signature.

Consultation letters are provided in **Appendix B**. The current draft MOA, updated since the June 2013 submittal, is provided in **Appendix C**.

5.3 COMMENT PERIOD

This EA will be distributed for public and agency review with a comment period of 30 days. The NPS would consider the comments prior to determining the final decision document that would be sent to the Regional Director of the National Capital Region for approval and signature.

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GLOSSARY AND ACRONYMS

GLOSSARY OF TERMS

Affected Environment: The existing environment to be affected by a proposed action and alternatives.

Archeological survey: Archeological survey is the process of using explicitly specified methods to prospect for archeological sites- appropriate survey methods vary widely for different environments and archeological resource types.

Best Management Practices: Methods that have been determined to be the most effective, practical means of preventing or reducing pollution or other adverse environmental impacts.

Contributing Resource: A building, site, structure, or object that adds to the historic significance of a property or district.

Council on Environmental Quality: Established by Congress within the Executive Office of the President with passage of the *National Environmental Policy Act* of 1969. CEQ coordinates federal environmental efforts and works closely with agencies and other White House offices in the development of environmental policies and initiatives.

Cultural Landscape: Environments that include natural and cultural resources associated with a historical context.

Cultural Resources: Prehistoric and historic districts, sites, buildings, objects, or any other physical evidence of human activity considered important to a culture, subculture, or community for scientific, traditional, religious, or other reason.

Cumulative Impacts: Under NEPA regulations, the incremental environmental impact or effect of an action together with the effects of past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions (40 CFR Part 1508.7).

Endangered Species: Any species that is in danger of extinction throughout all or a significant portion of its range. The lead federal agency for the listing of a species as endangered is the U.S. Fish and Wildlife Service, and it is responsible for reviewing the status of the species on a five-year basis.

Endangered Species Act (16 U.S.C. 1531 et seq.): An Act which provides a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved and which provides a program for the conservation of such endangered species and threatened species.

Environmental Assessment: An environmental analysis prepared pursuant to the National Environmental Policy Act to determine whether a federal action would significantly affect the environment and thus require a more detailed environmental impact statement (EIS).

Environmental Impact Statement: An environmental analysis prepared pursuant to the National Environmental Policy Act that concisely describes and analyzes a proposed action which may have a significant impact on the environment.

Executive Order: Official proclamation issued by the President that may set forth policy or direction or establish specific duties in connection with the execution of federal laws and programs.

Finding of No Significant Impact (FONSI): A document prepared by a federal agency showing why a proposed action would not have a significant impact on the environment and thus would not require preparation of an Environmental Impact Statement. A FONSI is based on the results of an Environmental Assessment.

Historic district: A geographically definable area, urban or rural, possessing a significant concentration, linkage, or continuity of sites, landscapes, structures, or objects, united by past events or aesthetically by plan or physical developments. A district may also be composed of individual elements separated geographically but linked by association or history.

National Register of Historic Places (NRHP): A register of districts, sites, buildings, structures, and objects important in American history, architecture, archeology, and culture, maintained by the Secretary of the Interior under authority of Section 2(b) of the *Historic Sites Act* of 1935 and Section 101(a)(1) of the *National Historic Preservation Act* of 1966, as amended.

Scoping: Scoping, as part of NEPA, requires examining a proposed action and its possible effects; establishing the depth of environmental analysis needed; and determining analysis procedures, data needed, and task assignments. The public is encouraged to participate and submit comments on proposed projects during the scoping period.

Topography: The physical features of a surface area including relative elevations and the position of natural and man-made features.

Section 106: Refers to Section 106 of the NHPA of 1966, which requires federal agencies to take into account the effects of their proposed undertakings on properties included or eligible for inclusion in the National Register and give the Advisory Council on Historic Preservation a reasonable opportunity to comment on the proposed undertakings.

Threatened Species: Any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Wetlands: The USAC E and the USEPA jointly define wetlands as: Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

ACRONYMS

ACHP	Advisory Council on Historic Preservation
ADT	Average Annual Daily Traffic
APE	Area of Potential Effects
BMP	Best Management Practices
BRAC	Base Realignment and Closure
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CLI	Cultural Landscape Inventory
COMAR	Code of Maryland Regulations
DNR	Department of Natural Resources
DO	Director's Order
EA	Environmental Assessment
EO	Executive Order
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impact
JBA	Joint Base Andrews Naval Air Facility Washington
LOS	Level of Service
MDE	Maryland Department of the Environment
MDP	Maryland Department of Planning
MHT	Maryland Historical Trust
M-NCPPC	Maryland – National Capital Park and Planning Commission
MOA	Memorandum of Agreement
mvm	Million Vehicle Miles
MSAT	Mobile Source Air Toxics
NAAQS	National Ambient Air Quality Standards
NACE	National Capital Parks-East
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPS	National Park Service
NRHP	National Register of Historic Places
PEPC	Planning, Environment, and Public Comment (NPS website)
ROW	Right-of-Way
SE/SC	Sediment Erosion/Sediment Control
SHA	Maryland State Highway Administration
SHPO	State Historic Preservation Office
SWM	Stormwater Management
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
VE	Value Engineering

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APPENDIX A:

Section 7 Coordination



Martin O'Malley, Governor
Anthony G. Brown, Lt. Governor
John R. Griffin, Secretary
Joseph P. Gill, Deputy Secretary

May 2, 2012

Mr. Bruce M. Grey
Maryland Department of Transportation
State Highway Administration
707 North Calvert Street
Baltimore, MD 21202

RE: Environmental Review for MD 4: from I-95/I-495 to MD 223, Improvements Including Interchange at Westphalia Road, Suitland Parkway and Dower House Road, Prince George's County, Maryland.

Dear Mr. Grey:

The Wildlife and Heritage Service has determined that there are no State or Federal records for rare, threatened or endangered species within the boundaries of the project site as delineated. As a result, we have no specific comments or requirements pertaining to protection measures at this time. This statement should not be interpreted however as meaning that rare, threatened or endangered species are not in fact present. If appropriate habitat is available, certain species could be present without documentation because adequate surveys have not been conducted or results not reported to us.

Thank you for allowing us the opportunity to review this project. If you should have any further questions regarding this information, please contact me at (410) 260-8573.

Sincerely,

Lori A. Byrne
Environmental Review Coordinator
Wildlife and Heritage Service
MD Dept. of Natural Resources

ER # 2012.0481.pg
Cc: T. Redman, DNR



United States Department of the Interior

U.S. Fish & Wildlife Service
Chesapeake Bay Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401
410/573 4575



Online Certification Letter

Today's date:

Project:

Dear Applicant for online certification:

Thank you for choosing to use the U.S. Fish and Wildlife Service Chesapeake Bay Field Office online list request certification resource. This letter confirms that you have reviewed the conditions in which this online service can be used. On our website (www.fws.gov/chesapeakebay) are the USGS topographic map areas where **no** federally proposed or listed endangered or threatened species are known to occur in Maryland, Washington D.C. and Delaware.

You have indicated that your project is located on the following USGS topographic map

Based on this information and in accordance with section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*), we certify that except for occasional transient individuals, no federally proposed or listed endangered or threatened species are known to exist within the project area. Therefore, no Biological Assessment or further section 7 consultation with the U.S. Fish and Wildlife Service is required. Should project plans change, or if additional information on the distribution of listed or proposed species becomes available, this determination may be reconsidered.

This response relates only to federally protected threatened or endangered species under our jurisdiction. For additional information on threatened or endangered species in Maryland, you should contact the Maryland Wildlife and Heritage Division at (410) 260-8540. For information in Delaware you should contact the Delaware Natural Heritage and Endangered Species Program, at (302) 653-2880. For information in the District of Columbia, you should contact the National Park Service at (202) 535-1739.

The U.S. Fish and Wildlife Service also works with other Federal agencies and states to minimize loss of wetlands, reduce impacts to fish and migratory birds, including bald eagles, and restore habitat for wildlife. Information on these conservation issues and how development projects can avoid affecting these resources can be found on our website (www.fws.gov/chesapeakebay).

We appreciate the opportunity to provide information relative to fish and wildlife issues, and thank you for your interest in these resources. If you have any questions or need further assistance, please contact Chesapeake Bay Field Office Threatened and Endangered Species

program at (410) 573-4531.

Sincerely,

Genevieve LaRouche
Field Supervisor



Martin O'Malley, Governor
Anthony G. Brown, Lt. Governor
John R. Griffin, Secretary
Joseph P. Gill, Deputy Secretary

Coordination Sheet for Maryland Department of Natural Resources, Environmental Review Unit information on fisheries resources, including anadromous fish, related to project locations and study areas

DATE OF REQUEST April 2, 2012: NAME OF REQUESTOR: Chrissy Brandt

PROJECT NAME AND LOCATION: MD 4: from I-95/I-495 to MD 223

The Maryland State Highway Administration is proposing improvements to MD 4 from east of the I-95/I-495 Interchange to west of MD 223 in Prince George's County, including interchange construction at Westphalia Road, Suitland Parkway, and Dower House Road. SHA initially coordinated with your agency during preparation of an Environmental Assessment/Finding of No Significant Impact, approved in 1998 and 2000, respectively. Due to the length of time that has elapsed since the previous coordination, we are reinitiating this request. A map of the project locations has been included for your reference.

NAME OF STREAM(S) (and MDE Use Classification) WITHIN THE STUDY AREA:
Unnamed Tributary to Cabin Branch, Use I

SUB-BASIN (6 digit watershed): 02-13-11

DNR RESPONSE:

 X Generally, no instream work is permitted in Use I streams during the period of March 1 through June 15, inclusive, during any year.

ADDITIONAL FISHERIES RESOURCES NOTES

Fish species identified by Maryland Biological Stream Survey (MBSS) in nearby locations include American eel, blacknose dace, creek chub, pumpkinseed, redbreast sunfish, swallowtail shiner, tessellated darter, and white sucker.

ADDITIONAL COMMENTS ON BMPS:

Existing riparian vegetation in the area of the stream channel should be preserved as much as possible to maintain aquatic habitat and provide shading to the stream. Areas designated for the access of equipment and for the removal or disposal of material should avoid impacts to the stream and associated riparian vegetation. Any temporarily disturbed areas should be restored and re-vegetated. The use of concrete or grouting required to conduct repairs should be managed to assure curing processes do not impact the stream or modify stream PH.

Any expected potential fish species should be adequately protected by the Use I instream work prohibition time of year restriction referenced above, through sediment and erosion control measures, and other Best Management Practices.

MD DNR, Environmental Review Unit signature



DATE: -----4-29-2013-----

APPENDIX B:

Section 106 Consultation



Maryland Department of Transportation
State Highway Administration

Parris N. Glendening
Governor
David L. Winstead
Secretary
Parker F. Williams
Administrator

December 16, 1997

RE: Project No. PG917B11
MD 4: East of I-95/I-495 to
West of MD 223
Prince George's County, Maryland

Mr. J. Rodney Little
State Historic Preservation Officer
Maryland Historical Trust
100 Community Place
Crownsville MD 21032-2023

Dear Mr. Little:

The purpose of this letter is to advise you of our consultation with the National Park Service, update you on the revisions to the alternates and provide to your office the draft report of the Phase 1B Archeological Identification survey for review and comment. In addition, we are seeking your concurrence in our determination that the Suitland Parkway, the only National Register resource within the Area of Potential Effect (APE) of this project, would be adversely affected. A draft Memorandum of Agreement (MOA) is included for your review.

Status Update

We previously received your comments, dated August 21, 1996, on the Alternates Retained for Detailed Study, and concurrence in the APE for archeology on January 21. Since that time we have consulted with representatives of the National Park Service regarding the project and its effect on the Suitland Parkway, listed on the National Register of Historic Places. A copy of the minutes (dated August 1) from our July 7 meeting are included as Enclosure 1. At the request of the National Park Service we developed alternates which would modify the design of the MD 4/Suitland Parkway interchange, as shown in the rendering included as Enclosure 2. For the most part, changes to the project's design will take place within the original footprint previously studied for archeology. In addition to presenting our findings from the original archeological survey, we have assessed the potential of these design modifications to impact previously unsurveyed areas.

Plan sheets of all alternates are included as Enclosure 3. The area of potential effect is shown on Enclosure 4. The Phase 1B Archeological Identification draft technical report is Enclosure 5. Enclosure 6 is a completed NADB Reports Recording Form, and our comments on the draft report itself are appended as Enclosure 7. The draft MOA is included as

My telephone number is _____

Maryland Relay Service for Impaired Hearing or Speech
1-800-735-2258 Statewide Toll Free

Mailing Address: P.O. Box 717 • Baltimore, MD 21203-0717
Street Address: 707 North Calvert Street • Baltimore, Maryland 21202

Enclosure 8. We have included a map showing areas subject to impacts as a result of design modifications implemented that were not included in the Phase IB archeological Identification Survey as Enclosure 9. Current alternatives are described in Enclosure 10. In order to assist you in visualizing this project we have included photographs of the current MD 4/Presidential Parkway/Suitland Parkway intersection in Enclosure 11. Enclosure 12 is an effects chart.

Project Description

Alternate 3, Options 1 and 1A proposes to construct a diamond interchange at the MD 4/Suitland Parkway intersection. These options include slightly different ramp modifications for traffic entering westbound MD 4 from Westphalia and will accommodate the businesses in the Penn Randall Business Park and the Presidential Corporate Center. Option 1A has a smaller turning radius for the ramp. MD 4 would travel over Suitland Parkway.

The National Park Service (NPS) expressed its preference for options which carried Suitland Parkway over MD 4. In response, the State Highway Administration (SHA) developed Options 2 and 2A for Alternate 3. These options are the same as Option 1 and 1A with the exception that MD 4 goes underneath of Suitland Parkway instead of over it. Similar to Alternate 3 Options 1 and 1A, Alternate 3 Option 2A has a smaller turning radius for the ramp. The design of a bridge carrying the Suitland Parkway over MD 4 is shown in a rendering included as Enclosure 2.

Subsequent to meeting with the National Park Service, SHA dropped Alternate 3, Options 1, 1A, 2 and 2A. These options were dropped due to further development that is expected west of Armstrong Lane, including PEPCO. SHA developed Alternate 3 Options 1 Modified and 2 Modified. Alternate 3, Option 1 Modified proposes to construct a diamond roundabout interchange at the MD 4/Suitland Parkway intersection. MD 4 would travel over Suitland Parkway. Traffic entering westbound MD 4 from Westphalia Road would continue on a two way service road that parallels Presidential Parkway, follows the Prince George's County Master Plan alignment A-67 and ties into A-66. This provides a continuous service road to the north of MD 4 from Presidential Parkway to Westphalia Road and the future A-66 and accommodates the businesses in the Penn Randall Business Park and the Presidential Corporate Center. Alternate 3, Option 2 Modified proposes the same service road concept, however, Suitland Parkway would travel over MD 4.

A description of other current alternates that have been retained:

Alternate 1 (No-Build)

Alternate 1 (no-build) would not provide any significant improvements to MD 4 within the study limits. The study portion of existing MD 4 consists of two different roadway sections. The section from I-95/I-495 to the east of Dower House Road consists of three 12-foot westbound lanes and two 12-foot eastbound lanes separated by a variable width (40-100 feet) depressed grass median. The section just east of Dower House Road to MD 223

(Woodyard Road) consists of two 12-foot lanes in each direction. The use of the 10-foot outside shoulder as a travel lane is permitted in the westbound direction during the morning rush hours. This section is also separated by a variable width (100-112 feet) depressed grass median. Minor improvements that would occur as part of normal maintenance and safety operations would not be expected to measurably affect roadway capacity or accident rates.

Because of the ongoing and proposed development in the area surrounding MD 4 and the growth of traffic volumes from Anne Arundel and southern Prince George's Counties into the Nation's Capital, all of the intersections and the mainline roadway of MD 4 within the study area are expected to operate at a level of service (LOS) below LOS D in both the AM and PM peak hours by the design year (2015). Fixed object and rear-end accidents already exceed the statewide average for similarly designed highways. It can be expected that as the magnitude of congestion increases over time, the rate of accidents will also increase under the no-build alternate.

Alternate 2, Option 2 proposes to eliminate the at-grade intersection through construction of a bridge that would result in Westphalia Road/Old Marlboro Pike crossing over MD 4. The proposed bridge would provide improved access points for businesses and residents, access for the firehouse located near the MD 4/Westphalia intersection and vehicles heading westbound on MD 4. The Maryland-National Capital Park and Planning Commission suggested a second structure in the vicinity of Suitland Parkway to provide a greater distance between the proposed interchange (Westphalia) and the existing interchange at the Capital Beltway. This was dropped, due to the associated costs of the additional structure.

Alternate 4, Options 4 and 5 propose to grade separate the MD 4/Dower House Road intersection. These options were well received at the Alternates Public Workshop, held on March 13, 1996 at Forestville High School, because they allow direct access to Marlboro Pike. Option 4 consists of a diamond interchange and Option 5 consists of a diamond roundabout.

Alternate 5, Option 1 proposes mainline widening, adding a third travel lane in each direction. The lanes would be added within the median heading eastbound and on the outside of the westbound lane. This option provides for one future High Occupancy Vehicle (HOV) lane in each direction within the existing median.

Identification of Historic Properties and Area of Potential Effect

Area of Potential Effect

Enclosure 4 shows the Area of Potential Effect for historic standing structures that includes the area into which elements could be introduced which would have the potential to affect characteristics qualifying resources for inclusion in the National Register. The nature of the area has been considered as regards the nature of the work within its context, relating to the terrain, the topography, the extent of the viewsheds, etc. Historical inventories, maps and

other materials were consulted to determine the possible presence of historic properties. We have considered the potential for elements to be introduced that could affect characteristics qualifying other historic properties for inclusion in the National Register.

As previously agreed by our respective offices, the Area of Potential Effects for archeological resources was confined to undisturbed areas associated with improvements to the intersections of MD 4 at Westphalia Road/Old Marlboro Pike, at Suitland Parkway/Presidential Parkway, and at Dower House Road. Delineation of the APE for archeology as a smaller portion of the project's larger spatial universe was accomplished through evaluation of detailed design plans and ground truthing to ascertain current land use and disturbance. Graphic representation of the project's APE within which archeological studies were conducted is provided in Enclosure 5. Areas associated with revisions to Alternate 3, Option 1 Modified and Option 2 Modified which have not been previously surveyed, but which have been assessed for archeological potential, are shown on Enclosure 9.

Historic Structures

The staff of our respective offices determined that the only resource within the APE is the Suitland Parkway, included in the National Register of Historic Places.

Archeological Sites

A Phase IB Archeological Identification survey was conducted within the APE for Alternative 2 Option 2, Alternate 3 Options 1 and 1A, Alternate 4 Options 4 and 5. The enclosed draft technical report (Enclosure 5) presents the findings and recommendations of the archeological survey for your review. All undisturbed areas with high archeological potential were investigated and no National Register eligible archeological resources were identified in the project's Area of Potential Effects. One isolated find location (18PRX150) was documented and interpreted as a secondarily deposited historic scatter. Our comments on the draft report itself are appended as Enclosure 7. Aside from some minor changes to the report, we believe our consultant has adequately documented an absence of significant archeological resources within this project's original APE.

For the most part, the revised APE for Alternate 3 Option 1 Modified and Option 2 Modified was included in our previous archeological survey. All undisturbed, high potential areas associated with a planned direct access to private property were tested with Shovel Test Pit Transects 23 and 28. No cultural materials were encountered. The majority of the revised APE associated with the widening of Presidential Parkway under Alternate 3 Option 1 Modified and Option 2 Modified was previously shovel tested with Shovel Test Pit Transects 8 - 13 with negative results. The remaining portions of the revised APE not subject to previous shovel testing have been substantially impacted by prior construction of existing Presidential Parkway. Given the location of the revised APE within an interfluvial upland setting, and the absence of structure locations on available historic maps, along with prior disturbance and negative findings from adjacent areas documented in our previous survey, we believe that the

untested portions of the Presidential Parkway widening have low archeological potential. In our opinion, no additional work is warranted for Alternate 3 Option 2 Modified.

Determination of Effect

Alternates Retained For Detailed Study include Alternate 1 (no-build), Alternate 2 Option 2, Alternate 3 Option 1 Modified and Option 2 Modified, Alternate 4 Option 4 and Option 5, and Alternate 5 Option 1. We have determined that Alternate 1 (No-Build), Alternate 2 Option 2, Alternate 4 Option 4 and Option 5, and Alternate 5 Option 1, would have no impact on the Suitland Parkway. Alternate 3 Option 1 Modified and Option 2 Modified would have an adverse pact on the Suitland Parkway. A draft Memorandum of Agreement is included as Enclosure 8. It has been revised in accordance with the comments provided by the National Park Service and FHWA.

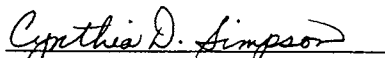
Concurrence Request

We request your concurrence with our determination that the MD 4 project would have an adverse effect on the Suitland Parkway, and that no further archeological work is warranted for the project. Please review the attached draft MOA and provide comments by January 19. Should you have any questions or wish additional information, please feel free to contact Ms. Rita Suffness on (410) 545-8561 for structures or Ms. Mary Barse at (410) 321-4003 for archeology.

Very truly yours,

Louis H. Ege, Jr.
Deputy Director
Office of Planning and
Preliminary Engineering

by:


Cynthia D. Simpson
Deputy Division Chief
Project Planning Division

Concurrence:

State Historic Preservation Office

Date

Mr. J. Rodney Little

MD 4: East of I-95/I-495 to West of MD 223

Page 6

LHE:RMS

Enclosures (12)

cc: Ms. Mary F. Barse (w/ Enclosures 1,2,6,8,10,11,12)
Mr. Bruce M. Grey
Dr. Charles Hall
Ms. Mary Huie (w/ Enclosures 1,2,6,8,10,11,12)
Mr. Joe Kresslein "
Ms. Rita M. Suffness "
Ms. Denise Winslow "



March 6, 1998

**Maryland
Department of
Housing and
Community
Development**

Division of Historical and
Cultural Programs

100 Community Place
Crownsville, Maryland 21032

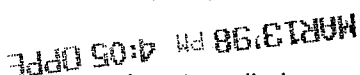
410-514-7600

1-800-756-0119

Fax: 410-987-4071

Maryland Relay for the Deaf:

1-800-735-2258


<http://www.dhcd.state.md.us>

Parris N. Glendening
Governor

Patricia J. Payne
Secretary

Raymond A. Skinner
Deputy Secretary

Ms. Cynthia D. Simpson
Deputy Division Chief
Project Planning Division
State Highway Administration
707 North Calvert Street
P.O. Box 717
Baltimore, MD 21203-0717

RE: Project No. PG917B11: MD 4: East of I-956/I-495 to West of MD 223,
Prince George's County, Maryland


Dear Ms. Simpson:

Thank you for your December 16, 1997 letter which the Trust received on December 18, 1997, regarding the above-referenced project. The Trust's comments and concurrence with SHA's determination of effect for this undertaking are outlined below.

Archeology -- Identification and Evaluation: We have reviewed a copy of the following draft report, prepared by John Milner Associates, Inc., dated May 1997: *Phase IB Archeological Identification Survey, MD 4: East of I-95/I-495 to West of MD 223, Prince George's County, Maryland*. The report provides clear illustrations and essential documentation of the survey's goals, methods, results, and recommendations. The draft is consistent with the reporting requirements of the *Standards and Guidelines for Archeological Investigations in Maryland* (Shaffer and Cole 1994). The survey did not identify any archeological sites within the area of potential effects. Further archeological investigations are not warranted for this particular project.

We have a few minor comments regarding the report itself. We ask SHA to have the consultant address the following issues, in addition to SHA's comments, in the preparation of the final report.

1. All references to the Trust should be corrected to read Maryland Historical Trust.
2. The Introduction should note the acreage of the survey areas.
3. SHA's comment number 3 is inaccurate; the use of the term *effects* as a noun is correct. The word *affect* is a verb. The consultant should keep the section headings as currently written.

Determination of Effect: Trust staff have reviewed the project file and attended the meeting held between SHA, the Trust and the National Park Service on January 17, 1998. The discussion at the meeting allowed new staff members to become familiar with the present project. As we understand the project, the improvements to MD 4 will consist of intersection changes from I-95/I-495 to beyond MD 223. Three



Ms. Cynthia D. Simpson
March 6, 1998
Page 2

intersection improvements: MD 4 and Westphalia Road (Alternate 2); MD 4 and Dower House Road (Alternate 4); and changes to the MD 4 median (Alternate 5) will have no impacts on historic properties or archeological sites. One intersection improvement will cause an adverse impact to a National Register eligible property: the proposed interchange between MD 4 and the Suitland Parkway (Alternate 3). Therefore, the Trust concurs that the MD 4: East of I-95/I-495 to West of MD 223 Improvements Project will have an *adverse effect* on historic properties.

Memorandum of Agreement: As a result of the adverse effect determination for the Suitland Parkway Interchange, the Trust met with SHA and the NPS to discuss the MD 4 Memorandum of Agreement. Enclosed is a copy of the draft MOA for your review. By copy of this letter we are requesting that all parties' comments regarding the draft be returned to Anne Bruder by Friday, March 20, 1998. Her telephone number is 410-514-7636 and her e-mail address is Bruder@dhcd.state.md.us. The Trust's fax number is 410-987-4071. If the draft MOA meets with all the parties' approval, we will put it in final form for execution by the signatories.

If you have questions or require additional information, please call Ms. Anne Bruder (for structures) at (410) 514-7636 or Ms. Beth Cole (for archeology) at (410) 514-7631. Thank you for your cooperation and assistance.

Sincerely,



J. Rodney Little
Director/State Historic Preservation Officer

JRL:EJC:AEB:9703581

Enclosure

cc: Mr. Bruce Grey (SHA)
Dr. Charles Hall (SHA)
~~Mr.~~ Rita Suffness (SHA)
Ms. Renee Sigel/Ms. Mary Huie (FHWA)
Mr. Terry Carlstrom (NPS)
Mr. Jeff Knoedler (NPS)
Mr. W. Dickerson Charlton
Ms. Pat Williams
Ms. Gail Rothrock
Mr. Don Creveling

Martin O'Malley, *Governor*
Anthony G. Brown, *Lt. Governor*



Beverley K. Swaim-Staley, *Secretary*
Neil J. Pedersen, *Administrator*

Maryland Department of Transportation

March 31, 2010

Re: Project No. PG618B21
MD 4 at Suitland Parkway Interchange
Prince George's County, Maryland
USGS *Upper Marlboro* 7.5' Quadrangles

Mr. J. Rodney Little
State Historic Preservation Officer
Maryland Historical Trust
100 Community Place
Crownsville MD 21032-2023

Dear Mr. Little:

Introduction and Project Description

The Maryland State Highway Administration (SHA) seeks to continue Section 106 coordination under the terms of the Memorandum of Agreement (MOA) for Project No. PG618B21, MD 4 at Suitland Parkway Interchange in Prince George's County. In accordance with Stipulation III of the MOA, SHA suggests that an amendment to the MOA is necessary due to changes to the design of the project. We seek your concurrence with our finding that the project will continue to have adverse effects on historic properties, and that an amendment to the existing MOA is warranted. We are providing updated project information, including current project plans, and a draft amendment to the MOA for your review and comment.

On December 16, 1997, SHA determined that the proposed interchange between MD 4 and the Suitland Parkway would have an adverse effect on historic properties. The Maryland Historical Trust (MHT) concurred with the determination on March 6, 1998. In 1999, the Federal Highway Administration (FHWA), MHT, and the National Park Service (NPS) executed a MOA to resolve adverse effects (Attachment 1). The design of the proposed interchange has changed since 1999 and the project will continue to have an adverse effect on the Suitland Parkway.

MD 4 (Pennsylvania Avenue) in Prince Georges County is a heavily traveled, four-lane north-south corridor. The interchange of MD 4 at Suitland Parkway is one of three interchanges being designed to replace three at-grade intersections along the MD 4 corridor between I-495 and MD 223. The current interchange configuration being designed is a diamond interchange with a directional ramp. To accommodate the heavy left turn movement from MD 4 northbound to Suitland Parkway westbound, the ramp will be a two-lane free flow directional ramp. As part of

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this interchange design, MD 4 will be widened to a three-lane section with room in the median for a future additional lane.

MD 4/Suitland Parkway Interchange

The existing historic parkway bridge that carries Suitland Parkway over the Andrews Air Force Base (AFB) ramps will not be able to accommodate the proposed typical section of Suitland Parkway. The existing condition of Suitland Parkway is four 12-foot lanes (two in each direction) with a three-foot shoulder on each side and a five-foot median. However, the large amount of traffic turning right from eastbound Suitland Parkway to southbound MD 4 makes it essential to provide additional lanes over the bridge.

In the proposed typical section, the westbound direction of Suitland Parkway will be unchanged, but in the eastbound direction there will be four 12-foot lanes passing over the bridge; two through lanes, a combined through-right turn lane, and an exclusive right turn lane which will then split off after the bridge to proceed onto southbound MD 4 via Ramp K. The portion of Presidential Parkway (opposite Suitland Parkway) that is to the east of MD 4 will be modified and reconstructed to accommodate the change in profile and the acceleration and deceleration lanes from the interchange ramps. A bike path will be constructed on the north side of the interchange. The interchange will be designed to provide a symbolic entrance to the nation's capital and to complement the historic character of the Suitland Parkway. Improvements to Suitland Parkway will be limited to the addition of deceleration and acceleration lanes at the MD 4 interchange. Specific design elements include extensive landscaping throughout the interchange, the reconstruction of a historic parkway bridge, and aesthetic treatment of new structures and ramps. The construction of the interchange will require 5.96 acres of perpetual easement and 9.55 acres of temporary easement for construction from the NPS property. No right-of-way will be acquired; however a perpetual easement is needed for all roadways, drainage facilities, and slopes that SHA will be required to maintain.

NuStar Energy, L.P. owns and operates an eight-inch high pressure petroleum products pipeline that services Andrews AFB. The existing pipeline runs parallel to and across Suitland Parkway and MD 4. The interchange construction's project limits encompass approximately 8,800 linear feet of the existing NuStar pipeline, requiring several sections of the existing pipeline to be relocated.

Project plans, including the pipeline relocation, are included as Attachment 2.

Stream Mitigation

To mitigate for the interchange project's natural resources impacts, SHA is proposing a stream restoration project along Marbury Drive in Prince George's County. The proposed location of the stream restoration project is approximately two-and-one-half miles northwest of the MD 4 Suitland Parkway Interchange project location. The site, located entirely within Prince George's County right-of-way, is a linear parcel along an existing unnamed tributary. It is

situated between eastbound and westbound Marbury Drive, and measures approximately 60 feet wide by 2,500 feet long. The site is within the developed residential neighborhood of District Heights. Land use along the existing tributary consists of maintained (mowed) grass with some sparsely scattered trees. The trees are primarily at the top of the slope, closest to the roadway. They do not provide any stream buffer or shading to the stream.

SHA intends to design and implement a more natural setting to replace the existing maintained, unbuffered stream. The work will involve buffering the existing stream channel with native plantings to provide shade. There are no plans to engineer the stream portion or manipulate the geomorphic characteristic of the stream. SHA is rather seeking to enhance and improve the existing channel without engineering manipulation, while also fitting the design with the surrounding community.

All vegetation would be native and appropriate for the Coastal Plain physiographic province of Maryland. Trees selected for the planting design would meet an average maximum height requirement. Recommended riparian plantings include: red chokeberry, buttonbush, witch hazel, spice bush, southern arrowwood, common elderberry, swamp azalea, highbush and lowbush blueberry, and sweet pepperbush. SHA is coordinating with the surrounding community to incorporate the community's plant preferences into the design.

Project plans for the stream restoration project are included as Attachment 3.

Funding

Federal funds are anticipated for this project.

Area of Potential Effects

In determining the Area of Potential Effects (APE) for this project, SHA considered possible physical, visual, atmospheric, and audible impacts to historic properties. In our previous coordination, the APE was defined as the immediate environs of the proposed interchange, including the area into which elements could be introduced that would have the potential to affect characteristics qualifying resources for inclusion in the National Register of Historic Places. This APE definition continues to be applicable to the redesigned project, but the APE has been expanded to include the area of direct impacts of the proposed pipeline relocation. The APE is indicated on the attached quadrangle map for Upper Marlboro (Attachment 4). The survey area for archeological resources is defined as the limits of proposed construction where ground disturbance would occur. For the steam mitigation site, the APE is defined as the Prince George's County right-of-way along the unnamed tributary between Marbury Drive, as indicated on the attached quadrangle for District Heights (Attachment 5).

Identification Methods and Results

Potentially significant architectural and archeological resources were both researched as part of the historic investigation instigated by the proposed interchange improvement project and stream mitigation site.

Architecture: SHA Architectural Historian Melissa Blair consulted the SHA-GIS Cultural Resources Database, previous architectural investigations, historic maps, and tax maps, and conducted a field visit on May 22, 2008.

There are no historic standing structures located in the APE of the stream mitigation site. The proposed stream restoration mitigation project will not impact historic standing structures.

The APE for the interchange project has been expanded to include the proposed pipeline relocation. The pipeline relocation will extend onto Andrews AFB property. During World War II, the introduction of a major military installation, the Andrews AFB, dramatically changed this area of Prince George's County. Beginning in 1942, the Army Corps of Engineers constructed four runways, 14 miles of taxiways, and supportive buildings and infrastructure at Camp Springs. The base was originally named the Camp Springs Army Air Field, but was later designed as the Andrews Army Air Field in honor of General Frank H. Andrews. Between 1943 and 1945, the base underwent a second building phase that provided more extensive operating facilities and base housing. In the 1950s, the base played a crucial role in air defense during the Korean War, which led to further expansion. After 1957, the special missions airlift operations of key U.S. government officials began at Andrews AFB, with the presidential air fleet, Air Force One, housed at the installation. During the 1960s, Andrews AFB began to oversee the arrival and departure of foreign dignities (Integrated Cultural Resources Management Plan, Andrews AFB, Maryland, Pages 2-23 through 2-26).

In 1994, the Andrews AFB was surveyed as part of the United States Army's responsibilities under Section 110 of the National Historic Preservation Act. The nearest standing structures identified by this survey and included in the MIHP are located approximately 1,500 feet south of the APE. None of these standing structures are in the vicinity of the pipeline relocation or proposed interchange.

The Suitland Parkway (PG:76A-22/NR-1175) is the only historic standing structure within the APE of the interchange project. The parkway is listed in the National Register of Historic Places (NRHP) for its significance in the areas of transportation and landscape architecture. The parkway is a designed historic landscape in which engineering structures, landscaping, and natural elements all contribute to the significance of the historic property.

The proposed interchange project will impact significant features of the parkway, including landscape features and a historic parkway bridge, and the existing viewshed at the eastern terminus of the parkway will be altered.

Removal of existing trees will be necessary to accommodate the proposed road alignment. Under the current design, approximately 4.43 acres of tree removal will be required on NPS property. This includes approximately 1.17 acres of Terrace Gravel Forest located on the southwest corner of the MD 4 and Suitland Parkway intersection. Impacts to these landscape features will alter character-defining elements of the parkway, impacting the parkway's historic setting.

The reconstruction of the MD 4/Suitland Parkway interchange will result in alteration of a historic parkway bridge. Built in 1944, the bridge at the north entrance to the Andrews AFB is a concrete rigid frame arch bridge with stone-faced wing walls and spandrels trimmed with granite dimensional masonry. The bridge is approximately 700 feet west of MD 4 and approximately 650 feet north of the air force base entrance gate. Widening the historic bridge will alter this contributing element of the parkway, impacting the parkway's historic design.

The existing terminus of the Suitland Parkway consists of an at-grade intersection with MD 4. The proposed interchange will introduce new permanent elements into the viewshed of the parkway, impacting the parkway's historic setting. Renderings of the proposed interchange are included as Attachment 6.

The proposed improvements impact significant features of the historic parkway and the project continues to have an adverse effect on the Suitland Parkway. As more specific avoidance, minimization, and mitigation measures are now proposed, SHA and the NPS have agreed that the original MOA should be amended. A draft Amendment is included for your review and comment (Attachment 7).

Minimization

Measures to minimize impacts to the parkway include extensive landscaping of the interchange, reconstruction of the historic parkway bridge at the entrance to Andrews AFB, and aesthetic treatment of new interchange structures and ramps.

The goal for the proposed landscaping plan is to visually integrate the proposed roadway improvements with the existing character of Suitland Parkway. Through the use of large groupings of flowering and shade trees the intent is to preserve and extend the experiential qualities of the parkway while also minimizing the visual impacts of the proposed bridges. In addition, large areas of bulb plantings, mainly along MD 4, will provide additional color in the spring.

There are specific regulations governing the types of plant material available for use on site. The site's proximity to Andrews AFB limits the mature height of proposed trees, acceptable mature tree height rises as distance from the runway increases. Approved tree species are also limited to minimize the attraction of birds. Typically, plants that fruit and large groupings of evergreen species are discouraged. SHA will work with NPS to designate parkway appropriate

plants which also follow the height and species limitations necessitated by the AFB. Landscaping plans are included in Attachment 2.

The existing historic parkway bridge that carries Suitland Parkway over the Andrews AFB ramps will be widened to provide enough width for the proposed typical section over the AFB ramps. The existing bridge is approximately 63 feet wide. The proposed widening will increase the width of the bridge by 44 to 49 feet to accommodate three additional lanes. In order to maintain the existing historic character of the bridge, it will be specified in the contract documents that the existing stone face of the piers, abutments, wingwalls, and parapets impacted by the improvements, will be carefully removed and reused on the proposed widened portion of the bridge. This will maintain the aesthetics of the historic bridge, even after the new modifications have been completed.

All proposed new interchange ramps and bridges on the project will utilize a façade, called a stone form liner, which is similar to that of the existing historic parkway bridge. The stone form liner will be used on all parapets, wingwalls, piers, columns and abutments to maintain the historic character of the gateway to Suitland Parkway and is meant to match the existing present features. SHA is awaiting input from NPS regarding aesthetic treatments that they would find acceptable.

Mitigation

In addition to our above described minimization measures, SHA proposes to fund a mitigation project to be developed in consultation with NPS that will enhance the Suitland Parkway. In meetings with NPS, we discussed providing NPS with an estimation of the value of the NPS land needed for permanent easement area. The amount would be applied to mitigation projects to enhance the Suitland Parkway. Potential projects include funding for a bike path along the parkway and slope enhancement at Suitland Parkway and Suitland Road. SHA is awaiting input from NPS regarding proposed mitigation projects.

Section 4(f) Temporary Use

The proposed improvements to the MD 4/Suitland Parkway interchange would temporarily impact approximately 9.5 acres of the Suitland Parkway. Areas requiring temporary easement would include those areas of minor grading, the area required for the installation of a bikepath, areas of landscaping and reforestation, and the land area required for access during project construction. Given that these improvements would occur by temporary occupancy only, the requirements of Section 4(f) would not apply in this instance based on MHT and NPS agreement with the following criteria as the officials with jurisdiction.

- The duration of the impact will be temporary, i.e., less than the time needed for construction of the project;
- There will be no change in the ownership of the land;
- The scope of the work will be minor, i.e., both the nature and the magnitude of the changes to the Section 4(f) resource are minimal;

- There are no anticipated permanent adverse physical impacts; and
- The land being used will be fully restored, i.e., the resource will be returned to a condition which is at least as good as that which existed prior to the project.

Archeology: SHA Archeologist Richard Ervin assessed the potential of the referenced project based on review of previous archeological studies, topographic and soils maps, aerial photographs, and examination of the SHA-GIS Cultural Resources database. A field visit was made to the project area in early 2007. For archeology, the survey area is defined as the limits of proposed construction, where ground disturbance would occur.

The survey area crosses gently sloping terrain cut by several tributaries of Cabin Branch, which flow to the east. At the west end of the survey area, the headwaters of Henson Creek parallel the east end of the Suitland Parkway. Soils are part of the Beltsville-Leonardtown-Chillum association, moderately deep, gently sloping, well-drained to poorly drained soils with a compact substratum.

Fiedel (1998) surveyed the MD 4 project corridor from east of I-95 to west of MD 223. Extensive shovel testing concentrated at the proposed MD 4/Suitland Parkway interchange and at the northern and southern termini of the current survey area recorded no archeological sites, and indicated considerable disturbance throughout the survey area. Parts of the survey area were also examined by Moeller, et al. (1995; Andrews AFB); Jones et al. (2002; Suitland Parkway); Child and Heidenrich (2004; Andrews AFB perimeter); and Banguilan and Boyd (2007; Westphalia Center tract). Six late historic period archeological sites were recorded in or near the survey area by the last named survey, all residential sites dating to the middle to late twentieth century (18PR843 to 18PR848). All are described as disturbed, and their late period suggests little research value.

Project plans have changed considerably since the 1998 survey. Impacts have changed, although not greatly in terms of ground disturbance, primarily by the re-design of ramps and service roads. However, based on the negative results of Fiedel's (1998) archeological investigation done for the project, and the extensive disturbance documented throughout the archeological survey area, the proposed interchange will not impact significant archeological sites. No further archeological work is warranted.

For the stream mitigation site, no archeological surveys have been conducted, and no archeological sites have been recorded in the survey area, which is flanked by mid twentieth-century suburban development. The stream appears to have been channelized and straightened. Based on the minor scope of construction, which will be confined to the stream banks, the proposed stream restoration will not impact significant archeological sites.

Mr. J. Rodney Little
MD 4 Suitland Parkway
Page Eight


Review Request

Please examine the attached plans, maps, draft amendment to the MOA, and Effects Table (Attachment 8). We request your concurrence by April 30, 2010 that the project continues to have an adverse effect on historic properties, and that an amendment of the existing MOA is warranted. Additionally, we request your concurrence that the 9.5 acres of land area requiring temporary easement is considered a temporary use under Section 4(f). By carbon copy, we invite the Prince George's County Historic Preservation Commission, Prince George's Heritage, Inc., and the National Park Service to provide comments and participate in the consultation process. Pursuant to the requirement of the implementing regulations found at 36 CFR Part 800, SHA seeks their assistance in identifying historic preservation issues as they relate to this specific project (see 36 CFR 800.2 (c) (4) and (6), and 800.3 (f) for information regarding the identification and participation of consulting parties, and 800.4, and 800.5 regarding the identification of historic properties and assessment of effects). For additional information regarding the Section 106 regulations, see the Advisory Council on Historic Preservation's website, www.achp.gov, or contact the Maryland State Highway Administration or the Maryland Historical Trust. If no response is received by April 30, 2010, we will assume that these offices decline to participate. Please contact Ms. Melissa Blair at 410-545-8560 (or via email at mblair@sha.state.md.us) with questions regarding standing structures for this project. Mr. Richard Ervin may be reached at 410-545-2878 (or via email at rervin@sha.state.md.us) with concerns regarding archeology.

Very truly yours,

Bruce M. Grey
Deputy Director
Office of Planning and
Preliminary Engineering

by:


Julie M. Schablitsky
Assistant Division Chief
Environmental Planning Division

- Attachments:
- 1) 1999 Memorandum of Agreement
 - 2) Project Plans – MD 4/Suitland Parkway Interchange
 - 3) Project Plans – Marbury Mitigation Site
 - 4) Area of Potential Effects Map – MD 4/Suitland Parkway Interchange
 - 5) Area of Potential Effect Map – Marbury Mitigation Site
 - 6) Rendering of the Proposed MD 4/Suitland Parkway Interchange
 - 7) Draft Amendment to the Memorandum of Agreement
 - 8) Effect Table

Mr. J. Rodney Little
MD 4 Suitland Parkway
Page Nine

cc: Ms. Melissa Blair, SHA-EPLD
Mr. Joel Gorder, National Capital Region, NPS (w/Attachments)
Mr. Bruce M. Grey, SHA-OPPE
Mr. David Hayes, National Capital Region, NPS (w/Attachments)
Ms. Denise King, DelMar Division, FHWA (w/Attachments 4-8)
Mr. Joseph Kresslein, SHA-EPLD
Mr. Eric Marabello, SHA-OHD
Mr. Peter May, National Capital Region, NPS (w/Attachments)
Mr. Doug McElrath, Prince George's Heritage, Inc. (w/Attachments)
Ms. Margaret O'Dell, National Capital Region, NPS (w/Attachments)
Mr. Jitesh Parikh, DelMar Division, FHWA
Mr. Alex Romero, National Capital Park-East, NPS (w/Attachments)
Ms. Gail Rothrock, Prince George's Historic Preservation Commission (w/Attachments)
Ms. Teri Soos, SHA-OHD
Mr. Stephen Syphax, National Capital Park-East, NPS (w/Attachments)
Ms. Alexis Zimmerer, SHA-EPLD (w/Attachments 4-8)

**Concurrence with the MD State Highway Administration's
Determination(s) of Eligibility and/or Effects**

Project Number: PG618B21 **MHT Log No.** 201001764
Project Name: MD 4 at Suitland Parkway Interchange
County: Prince George's
Letter Date: March 31, 2010

The Maryland Historical Trust has reviewed the documentation attached to the referenced letter and concurs with the MD State Highway Administration's determinations as follows:

Eligibility (as noted in the Eligibility Table [Attachment N/A]):

☐ Concur
☐ Do Not Concur

Effect (as noted in the Effects Table [Attachment 8]):

☐ No Properties Affected
☐ No Adverse Effect
☐ Conditioned upon the following action(s) (see comments below)
☒ Adverse Effect

Agreement with FHWA's Section 4(f) criteria of temporary use (as detailed in the referenced letter, if applicable):

☒ Agree

Comments:

MHT concurs with SHA that the overall undertaking continues to adversely affect historic properties. The proposed stream restoration mitigation project will not impact historic properties. Rather than amend the existing Memorandum of Agreement (MOA) originally executed in 1999, we request that a new agreement be developed and suggest that a meeting be held with the consulting parties to discuss mitigation opportunities. We look forward to working with SHA and the consulting parties to execute a new MOA.

By:


MD State Historic Preservation Office/
Maryland Historical Trust

7-9-10
Date

Return by U.S. Mail or Facsimile to:
Dr. Julie M. Schablitsky, Assistant Division Chief, Environmental Planning Division,
MD State Highway Administration, P.O. Box 717, Baltimore, MD 21203-0717
Telephone: 410-545-2883 and Facsimile: 410-209-5004

Cc: Gail Rothrock, Prince George's County HPC
Denise King, FHWA
David Hayes, NPS, National Capital Region
Stephen Syphax, NPS, National Capital Park - East

Martin O'Malley, *Governor*
Anthony G. Brown, *Lt. Governor*



Darrell B. Mobley, *Acting Secretary*
Melinda B. Peters, *Administrator*

MARYLAND DEPARTMENT OF TRANSPORTATION

April 11, 2013

Re: Project No. PG618B21
MD 4 at Suitland Parkway Interchange
Property Acquisition near Fort Foote
Prince George's County, Maryland
USGS *Upper Marlboro* 7.5' Quadrangles

Mr. J. Rodney Little
State Historic Preservation Officer
Maryland Historical Trust
100 Community Place
Crownsville MD 21032-2023

Dear Mr. Little:

Introduction and Project Description

Pursuant to the Memorandum of Agreement (MOA) for MD 4 at the Suitland Parkway Interchange in Prince George's County, Project No. PG618B21, this letter serves to inform the Maryland Historical Trust (MHT) of the Maryland State Highway Administration's (SHA) finding that there would be no additional impacts to historic properties by proposed property acquisition near Fort Foote. SHA intends to purchase a 12.8-acre parcel to serve as part of the package of mitigation for the impacts to the NRHP-listed Suitland Parkway, and to transfer the property to NPS. The property is adjacent to the National Park Service (NPS) owned Fort Foote, PG:80-6, which is listed on the National Register of Historic Places (NRHP).

On December 16, 1997, SHA determined that proposed improvements to the MD 4 and Suitland Parkway interchange would have an adverse effect on historic properties. The Maryland Historical Trust (MHT) concurred with the determination on March 6, 1998. In 1999, the Federal Highway Administration (FHWA), MHT, and the National Park Service (NPS) executed an MOA to resolve adverse effects. The design of the interchange has changed since 1999 and the project would continue to have an adverse effect on the Suitland Parkway.

The subject parcel, located at 8801 Fort Foote Road, Fort Washington, Prince George's County, is 12.8 acres in size and is unimproved. No standing structures are present on the property, which is owned by a developer and is reportedly slated for subdivision in the future. SHA proposes to purchase the parcel as part of the mitigation for the adverse impacts caused by the construction of the MD 4/Suitland Parkway interchange. The parcel is adjacent to National

My telephone number/toll-free number is _____

Maryland Relay Service for Impaired Hearing or Speech 1.800.735.2258 Statewide Toll Free

Street Address: 707 North Calvert Street • Baltimore, Maryland 21202 • *Phone* 410.545.0300 • www.roads.maryland.gov

Mr. J. Rodney Little

MD 4 at Suitland Parkway Interchange, Property Acquisition near Fort Foote

Page 2

Park Service property at NRHP-listed Fort Foote, PG:80-6. NPS is amendable to the acquisition of this parcel by SHA and transfer to NPS ownership (Attachment 1). Mapping of the subject parcel is included as Attachment 2a through 2c.

Funding

Federal funds are anticipated for this project.

Area of Potential Effects

In determining the Area of Potential Effects (APE) for this project, SHA considered possible visual, audible, atmospheric and/or physical impacts to historic properties, both archeological sites and standing structures that would diminish any National Register of Historic Places (NRHP) qualifying characteristic of the historic property's integrity. The APE is confined to the parcel of land that SHA wishes to purchase. The archeology survey area is defined as the limits of construction where ground disturbance would occur, and is therefore contiguous with the APE. The APE is indicated on the attached SHA quadrangle map for Alexandria (VA) in Attachment 3.

Identification Methods and Results

Potentially significant architectural and archeological resources were both researched as part of the historic investigation instigated by the proposed property acquisition near Fort Foote for the MD 4 at Suitland Parkway Interchange.

Architecture: SHA Architectural Historian Anne E. Bruder consulted the SHA-GIS Cultural Resources Database, Maryland Property View and aerial photographs a parcel of land at 8801 Fort Foote Road, Fort Washington, Prince George's County.

There are no historic standing structures on the subject parcel and no construction activities of any kind would be done on the parcel. Purchase of the property would not introduce new visual, physical, audible or atmospheric elements, and would protect the property and the adjacent NRHP eligible Fort Foote against future development.

The proposed property purchase would have no impact on historic standing structures, and there would be no additional impacts by the MD 4 at Suitland Parkway Interchange project as a result of the property acquisition.

Archeology: SHA Archeologist Richard Ervin assessed the potential of the survey area through consultation of the SHA-GIS Cultural Resources Database, historic mapping, and prior studies. No field visit was warranted based on the nature of the project, which would entail protection of the subject property without ground disturbance.

No archeological surveys have been conducted in the APE, and no archeological sites are recorded. Nearby surveys on the peninsula on which Fort Foote is located (Kreisa and

Mr. J. Rodney Little

MD 4 at Suitland Parkway Interchange, Property Acquisition near Fort Foote

Page 3

McDowell 2008; and Ballweber 1986) recorded several historic and prehistoric sites, and there are undoubtedly Civil War era archeological resources throughout the present boundary of Fort Foote. The same types of archeological resources may be present on the subject parcel. Soils throughout much of the APE are mapped as Beltsville silt loam, 2 to 10% slopes, a soil type that is likely to contain archeological resources. The presence of Croom Urban land Complex soils at the eastern edge of the parcel indicates a degree of disturbance in that area.

The property proposed for acquisition is likely to contain archeological resources. However, the proposed acquisition would entail no ground disturbance and the lacks the potential to impact significant archeological resources. There would be no additional impacts by the MD 4 at Suitland Parkway Interchange project as a result of the property acquisition.

Review Request

Please examine the attached maps and Effects Table included as Attachment 4. We request your concurrence by April 30, 2013 that there would be no additional impacts to historic properties by the proposed property acquisition near Fort Foote for the MD 4 at Suitland Parkway Interchange. By carbon copy, we invite the Prince George's Heritage, Inc., and the Prince George's County Historic Preservation Comm. to provide comments and participate in the Section 106 process. Pursuant to the requirements of the implementing regulations found at 36 CFR Part 800, SHA seeks their assistance in identifying historic preservation issues as they relate to this specific project (see 36 CFR §800.2(c)(3) and (5), and §800.3(f) for information regarding the identification and participation of consulting parties, and §800.4, and §800.5 regarding the identification of historic properties and assessment of effects). For additional information regarding the Section 106 regulations, see the Advisory Council on Historic Preservation's website, www.achp.gov, or contact the Maryland State Highway Administration or the Maryland Historical Trust. If no response is received by April 30, 2013, we will assume that these offices decline to participate. Please call Anne Bruder at 410-545-8559 or via email at abruder@sha.state.md.us with questions regarding standing structures for this project. Mr. Richard Ervin a may be reached at t 410-545-2878 or via email at rervin@sha.state.md.us with concerns regarding archeology.

Very truly yours,


For

Julie M. Schablitsky
Assistant Division Chief
Environmental Planning Division

Digitally signed by April Fehr for
DN: cn=April Fehr for, o=SHA,
ou=EPLD-CRS,
email=afehr@sha.state.md.us, c=US
Date: 2013.04.10 11:41:47 -04'00'

Mr. J. Rodney Little

MD 4 at Suitland Parkway Interchange, Property Acquisition near Fort Foote

Page 4

Attachments: 1) Letter from NPS
2) Project Mapping
3) APE Mapping
4) Effects Table

cc: Ms. Anne Bruder, SHA- EPLD
Mr. Richard Ervin, SHA- EPLD
Mr. Joseph Kresslein, SHA- EPLD
Mr. Moreshwar Kulkarni, SHA- OHD
Ms. Heather Lowe, SHA-EPLD
Ms. Jeanette Mar, FHWA (w/ Attachments)
Mr. Doug McElrath, Prince George's Heritage, Inc. (w/Attachments)
Mr. Howard Berger, Prince George's County Historic Preservation Comm.
(w/Attachments)
Ms. Jennifer Stabler, Prince George's County Historic Preservation Comm.
(w/Attachments)
Mr. Stephen Syphax, NPS NACE-East
Dr. Julie M. Schablitsky, SHA-EPLD



United States Department of the Interior

NATIONAL PARK SERVICE

National Capital Parks-East
1900 Anacostia Drive, S.E.
Washington, D.C. 20020

IN REPLY REFER TO:

L1415 (NCR-NACE/RM)

March 12, 2013

Douglas H. Simmons
Deputy Administrator/Chief Engineer for
Planning, Engineering, Real Estate and Environment
Maryland State Highway Administration
Maryland Department of Transportation
707 North Calvert Street
Baltimore, Maryland 21202

Re: Suitland Parkway at MD 4 (Pennsylvania Avenue) Interchange Project
Project No: PG6185170 / PG618B21
Concurrence on property acquisition at 8801 Fort Foote Road (Parcel A) in Fort Washington,
Maryland for Mitigation/Park Replacement purposes

Dear Mr. Simmons:

This is in response to your letter of February 14, 2013 in which you sought National Park Service (NPS) concurrence on Maryland State Highway Administration's (MDSHA) acquisition of approximately 12.8 acres of forested property that abuts the federally-owned Fort Foote Park in Prince George's County, Maryland as partial mitigation for impacts to parklands resulting from the Suitland Parkway/MD 4 (Pennsylvania Avenue) Interchange Project. We are excited to learn that the subject property is for sale and that there may be the opportunity for your agency to acquire this important site for ultimate transfer to the NPS.

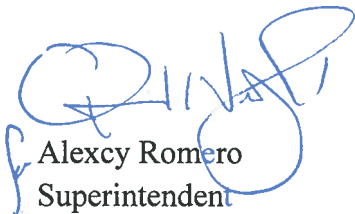
We concur that acquisition of the subject property would be part of an overall package to mitigate unavoidable impacts resulting from the Suitland Parkway/MD 4 Interchange Project and we strongly support your agency's efforts to acquire the site. As you know, there are steps that we must follow in the federal property acquisition process, including completion of a Level-1 Pre-Acquisition Survey that raises no currently unknown issues such as environmental contamination associated with the property.

Barring any unexpected finds of environmental contamination or similar issues resulting from pre-acquisition site investigations, and recognizing that additional coordination and consultation between the NPS and the Federal Highway Administration's DelMar Division is in order, the NPS agrees:

- a. to accept ownership of the property at 8801 Fort Foote Road (Parcel A) in Fort Washington, Maryland;
- b. that the subject property will be included in the comprehensive mitigation package being developed by MDSHA for all of the project-related impacts to the historic Suitland Parkway; and
- c. that the transfer of the subject property from MDSHA to the NPS would mitigate the fee simple acquisition of the NPS property loss to the Suitland Parkway/MD 4 Interchange Project.

You have our full support as you continue the process to acquire the subject property. Please contact me or Chief of Resource Management, Stephen Syphax at (202) 690-5160 for follow-up. We look forward to working with you on this beneficial property acquisition and on the overall Suitland Parkway/MD 4 Interchange Project.

Sincerely,



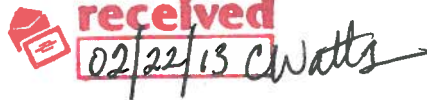
Alexcy Romero
Superintendent

Martin O'Malley, *Governor*
Anthony G. Brown, *Lt. Governor*



Darrell B. Mobley, *Acting Secretary*
Melinda B. Peters, *Administrator*

MARYLAND DEPARTMENT OF TRANSPORTATION



February 14, 2013

RE: Termini: MD 4 (Pennsylvania Avenue) at Suitland Parkway Interchange Project
Project No.: PG6185170 / PG618B21
Concurrence on property acquisition for Mitigation/Park Replacement purposes

Mr. Alex Romero
Park Superintendent
National Capital Parks – East
1900 Anacostia Dr SE
Washington DC 20020

Dear Mr. Romero:

The purpose of this letter is to obtain your concurrence with the proposed acquisition of the property located at 8801 Fort Foote Road ("Fort Foote property") in Fort Washington, Prince George's County by the Maryland State Highway Administration (MDSHA). As you may know, MDSHA plans to construct an interchange at MD Route 4 (Pennsylvania Avenue) and Suitland Parkway in Suitland, Prince George's County. Regrettably, there are unavoidable impacts to the National Park Service (NPS) owned lands due to the highway construction. In order to mitigate the property impacts, the Fort Foote property was identified by NPS staff as a preferred mitigation and/or park replacement property.

The construction of this project requires fee simple acquisition of approximately 5.963 acres of land from NPS. Throughout this process, MDSHA has been in regular consultation with NPS and Federal Highway Administration (FHWA – DelMar Division) staff with the aim of developing solutions to various project issues needing resolution. It is our understanding that NPS staff has expressed an interest in the Fort Foote property to MDSHA. This property has a land area of 12.8 acres and it is adjacent to the Fort Foote Park owned by NPS.

Based on e-mail communication received from Mr. Stephen Syphax, Chief, Resource Management Division of the National Capital Parks – East Unit of NPS on September 7, 2012, and subsequently at the joint meeting between MDSHA, NPS and FHWA – DelMar Division staff on December 6, 2012, it was reiterated by NPS staff that NPS viewed the Fort Foote property as the preferred priority for potential acquisition by MDSHA.

Our preliminary investigation of the Fort Foote property shows that it is on the market for sale. Consequently, MDSHA intends to investigate the potential of acquiring this property on behalf of NPS to mitigate the project's right-of-way impact on NPS land. However, in order for MDSHA to proceed with this effort, we are requesting your concurrence on the following:

My telephone number/toll-free number is 410-545-0411 or 866-697-0559
Maryland Relay Service for Impaired Hearing or Speech 1.800.735.2258 Statewide Toll Free

Street Address: 707 North Calvert Street • Baltimore, Maryland 21202 • Phone 410.545.0300 • www.roads.maryland.gov

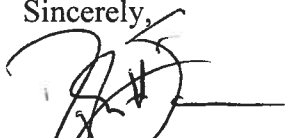
Mr. Alex Romero
PG6185170: MD 4 / Suitland Parkway Interchange Construction
Page Two
February 14, 2013

- a. NPS agrees to accept the ownership of the Fort Foote property should MDSHA be successful in acquiring the Fort Foote property;
- b. NPS agrees that the Fort Foote property will be included in the comprehensive mitigation package being compiled by SHA for all of the project-related impacts to NPS lands; and
- c. NPS agrees that the transfer of the Fort Foote property to NPS would fully mitigate the fee simple acquisition of the 5.963 acres from NPS.

While it is understood that additional coordination and consultations with NPS and FHWA-DelMar Division is required, at this time we are requesting that NPS respond with its concurrence to this letter within 30 days. It is important a response is obtained within this time frame, so MDSHA could begin the process of acquiring this property, should you concur.

Thank you for your anticipated cooperation and assistance in this matter. Should you have further questions on the matter, please contact Mr. Zal Angster via telephone at (410) 545-2813 or cangster@sha.state.md.us.

Sincerely,



Douglas H. Simmons
Deputy Administrator/Chief Engineer for
Planning, Engineering, Real Estate and Environment

Encl: Aerial map
Land records for the property

cc: Mr. David Hayes, NPS
Mr. Moreshwar Kulkarni, MDSHA, Office of Highway Development
Mr. Joseph Kresslein, MDSHA, Office of Planning and Preliminary Engineering
Mr. John Wedemeyer, MDSHA, Office of Real Estate, District 3
Ms. Jeanette Mar, FHWA, DelMar Division
Ms. Keilyn Perez, FHWA, DelMar Division
Mr. Stephen Syphax, NPS, NACE-East

Maryland Department of Assessments and Taxation
Real Property Data Search (vws.1A)
PRINCE GEORGE'S COUNTY

[Go Back](#)
[View Map](#)
[New Search](#)
[GroundRent](#)
[Redemption](#)
[GroundRent](#)
[Registration](#)

Account Identifier: District - 12 Account Number - 1203876

Owner Information			
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Owner Name:	FRIENDSHIP GREENS AT POTOMAC LLC	Use:	RESIDENTIAL
Mailing Address:	ALEXANDER NNABUE 10288 LAKE ARBOR WAY MITCHELLVILLE MD 20721-0335	Principal Residence:	NO
		Deed Reference:	1) /25403/ 00699 2)

Location & Structure Information	
----------------------------------	--

Premises Address	Legal Description
8801 FORT FOOTE RD FORT WASHINGTON 20744-0000	PARCEL A

Map	Grid	Parcel	Sub District	Subdivision	Section	Block	Lot	Assessment Area	Plat No:	A-7297
0113	00C2	0000		5100				1	Plat Ref:	

Special Tax Areas	Town	NONE
	Ad Valorem	
	Tax Class	8

Primary Structure Built	Enclosed Area	Property Land Area	County Use
		12.8000 AC	001

Stories	Basement	Type	Exterior
----------------	-----------------	-------------	-----------------

Value Information				
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	Base Value	Value	Phase-in Assessments	
		As Of	As Of	As Of
		01/01/2013	07/01/2012	07/01/2013
Land	287,900	287,900		
Improvements:	0	0		
Total:	287,900	287,900	287,900	287,900
Preferential Land:	0			0

Transfer Information					
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Seller:	HOUSING AUTHORITY OF P G COUNT	Date:	06/26/2006	Price:	\$320,000
Type:	NON-ARMS LENGTH OTHER	Deed1:	/25403/ 00699	Deed2:	
Seller:	HOUSING AUTHORITY OF PRINCE GEORGE	Date:	02/03/1993	Price:	\$0
Type:	NON-ARMS LENGTH OTHER	Deed1:	/08636/ 00199	Deed2:	
Seller:	PRINCE GEORGES COUNTY	Date:	02/03/1993	Price:	\$0
Type:		Deed1:	/08636/ 00199	Deed2:	

Exemption Information			
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Partial Exempt Assessments	Class	07/01/2012	07/01/2013
County	000	0.00	
State	000	0.00	
Municipal	000	0.00	0.00

Tax Exempt:	Special Tax Recapture:
Exempt Class:	NONE

Homestead Application Information	
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Homestead Application Status:	No Application
--------------------------------------	----------------

25403 699

NO TITLE EXAMINATION

QUITCLAIM DEED

THIS QUITCLAIM DEED, made this 2 day of ~~November, 2005~~ ^{February 2006}, by and between Housing Authority of Prince George's County, Grantor, and Friendship Greens at Potomac, LLC, Grantee, , conveys the real property described below.

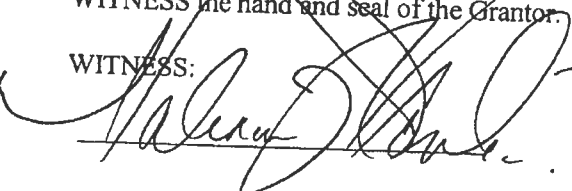
WITNESSETH, that the Grantor, for One dollar (\$320,000.00), does hereby grant, convey and assign to the Grantee, all that lot of ground situate in Prince George's County, Maryland and described as follows:

Commonly known as 9512 8801 Fort Foote Road, Fort Washington, Maryland 20744

To have and to hold the land and premises aforesaid, with all the privileges, improvements, easements, and appurtenances thereunto belonging and all the rents, issues and profits thereof, unto the Grantee, its heirs and assigns forever, so that neither the Grantor, nor her heirs or assigns, nor any other person claiming title through or under them, shall or will hereafter claim or demand any right or title to the premises herein conveyed, or any part thereof; but they and every one of them shall by these presents be forever barred and excluded.

WITNESS the hand and seal of the Grantor.

WITNESS:

 (SEAL)
Housing Authority of Prince George's County

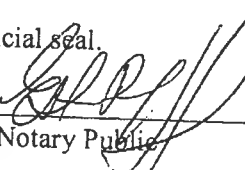
State of _____
County of _____

I hereby Certify, That on this 2 day of ~~November, 2005~~ ^{February}, before me, the subscriber, a Notary Public of the State Aforesaid, personally appeared Housing Authority of Prince George's County, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged the foregoing Deed to be his act, and in my presence signed and sealed the same.

In Witness Whereof, I hereunto set my hand and official seal.

My commission expires: July 8, 2009

Return to:


Notary Public

PRINCE GEORGE'S COUNTY, MD
APPROVED BY 
#07R

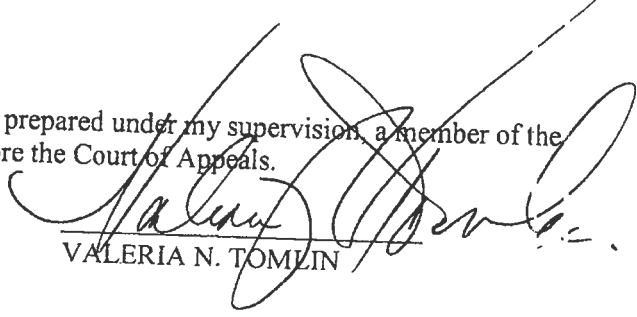
JUN 26 2006

\$1,408.00 RECORDATION TAX PAID
\$4,480.00 TRANSFER TAX PAID

25403 700

Regional Title and Escrow
9701 Apollo Drive
Suite 297
Largo, Maryland 20774

I hereby certify that this document was prepared under my supervision, a member of the Maryland Bar admitted to practice before the Court of Appeals.


VALERIA N. TOMLIN

25403 701

The Legal Description of the property as recorded in the Land records of Prince George's County, Maryland is Liber 5357 at Folio 484, and further described as "Parcel A" Davis Tract Elementary School Site, containing 12.8 acres of land and assessed at the Tax Account Number 1203876



**8801 Fort Foote Road
Fort Washington, MD**

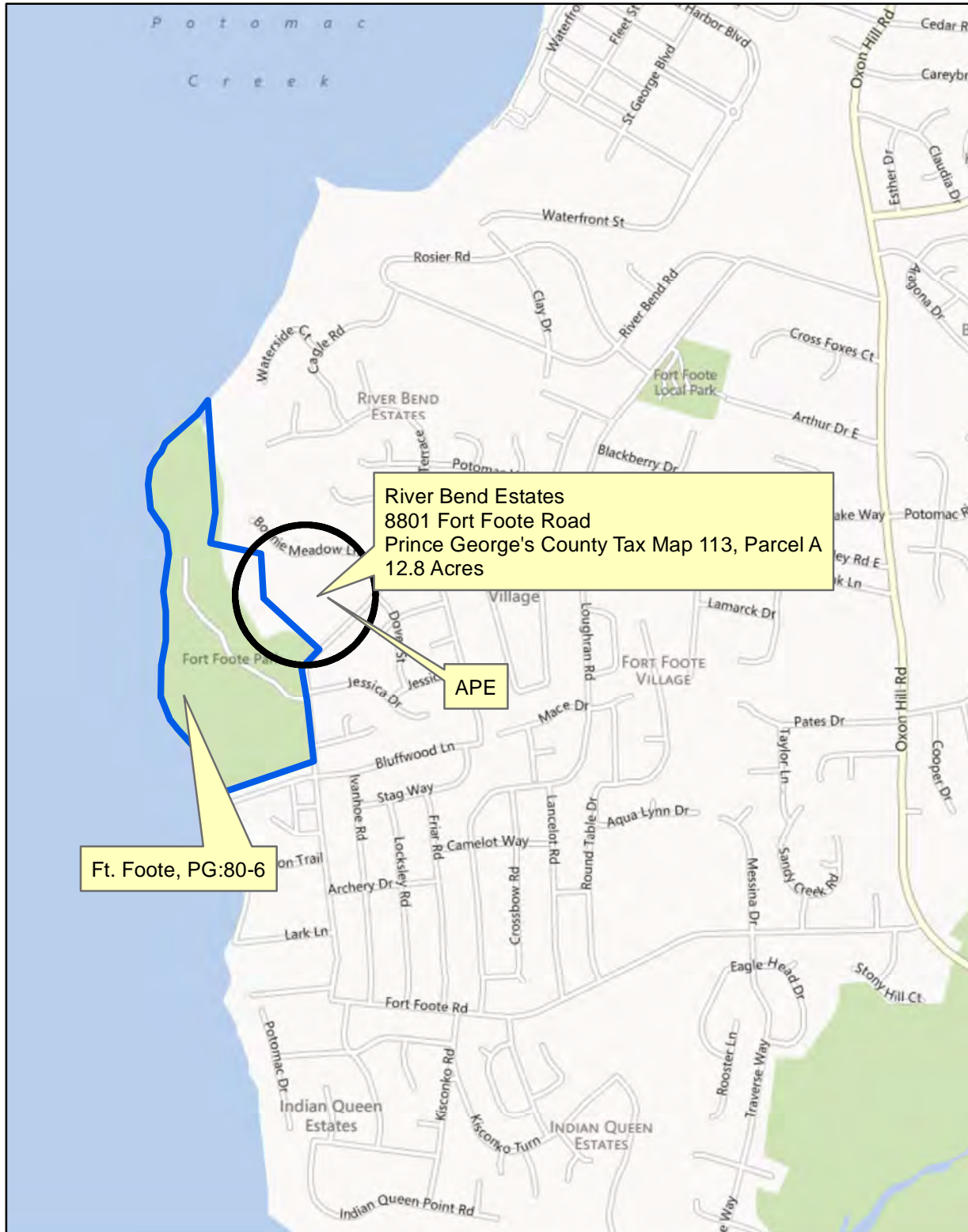
Prince George's County
Aerial Photography 2011



APE Map: Alexandria (VA) SHA Quadrangle

MD 4: Suitland Parkway Parkland Mitigation Acquisition

Project No. PG618B21





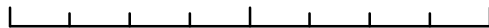
Project Location Map

MD 4 Suitland Pkwy Property Transfer
Prince George's County

1:24000

Alexandria Quad

0 1,250 2,500 5,000 Feet





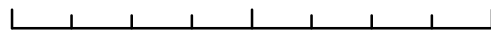
Property View Map

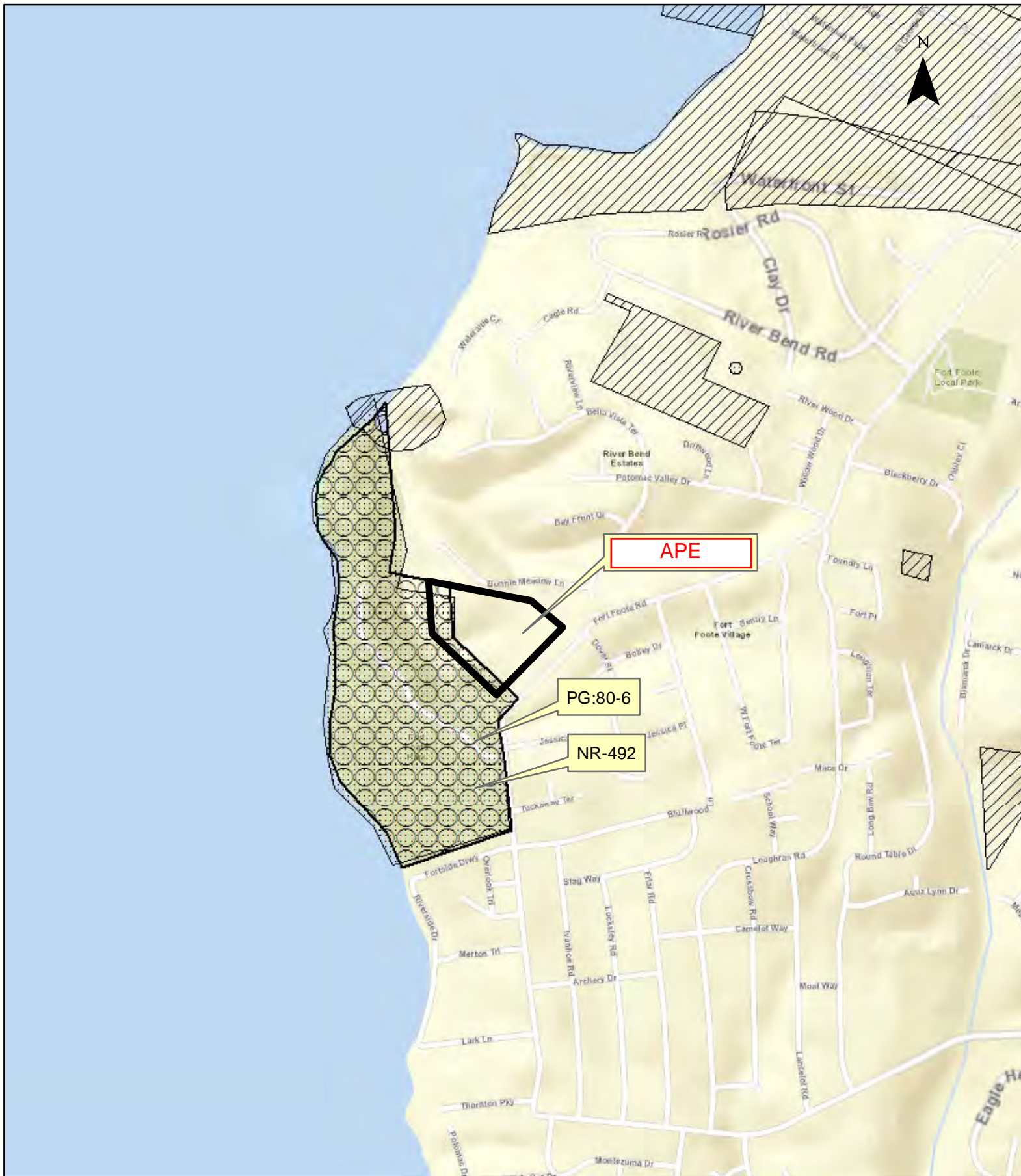
MD 4 Suitland Pkwy Property Transfer
Prince George's County

1:6000

0 312.5 625 1,250 Feet

Alexandria Quad





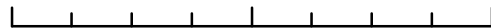
Cultural Resources Map

MD 4 Suitland Pkwy Property Transfer
Prince George's County





1:12000

Alexandria Quad

0 625 1,250 2,500 Feet



Legend

-  MIHP
-  MHT Easements
-  Arch Surveys
-  National Register of Historic Places

Effects Table

Attachment #4

Project Name: MD 4 at Suitland Parkway Interchange, Property Acquisition near Fort Foote

April 11, 2013

Resource	Type	Alternative		Attachment	Remarks
		Impact	SHPO Concur		
Fort Foote, PG:80-6	S	None	Requested 3/11/2013		
Effect					

Codes:

Resource Types: S (Structure), A (Archeological Site), HD (Historic District), NHL (National Historic Landmark)
 Impact: None, No Adverse, Adverse
 Effect: NPA (No Properties Affected), NAE (No Adverse Effect), AE (Adverse Effect)
Bold rows indicate review action requested

**Concurrence with the MD State Highway Administration's
Determination(s) of Eligibility and/or Effects**

Project Number: _____ **MHT Log No.** 201301583
Project Name: **MD 4 at Suitland Parkway Interchange, Property Acquisition near
Fort Foote**
County: **Prince George's**
Letter Date: **April 11, 2013**

The Maryland Historical Trust has reviewed the documentation attached to the referenced letter and concurs with the MD State Highway Administration's determinations as follows:

Eligibility (as noted in the Eligibility Table [N/A]):

- ☐ Concur
- ☐ Do Not Concur

Effect (as noted in the Effects Table [Attachment 4]):

- ☐ No Properties Affected
- ☐ No Adverse Effect
- ☐ Conditioned upon the following action(s) (see comments below)
- ☐ Adverse Effect

Comments:

THE TRUST AGREES THAT THE ACQUISITION OF THIS 12.8 ACRE PARCEL OF LAND
DOES NOT CONSTITUTE AN ADDITIONAL IMPACT TO HISTORIC PROPERTIES AND THAT THE
EVENTUAL TRANSFER OF THIS PROPERTY TO NPS WILL SERVE AS PARTIAL MITIGATION
FOR SHA PROJECT NO. PG618B21. WE LOOK FORWARD TO WORKING WITH SHA
AND THE CONSULTING PARTIES TO EXECUTE AN MOA FOR THE OVERALL UNDERTAKING.

By: _____

MD State Historic Preservation Office/
Maryland Historical Trust

Date

5/8/2013

Return by U.S. Mail or Facsimile to:
Dr. Julie M. Schablitsky, Assistant Division Chief, Environmental Planning Division,
MD State Highway Administration, P.O. Box 717, Baltimore, MD 21203-0717
Telephone: 410-545-8870 and Facsimile: 410-209-5046

Martin O'Malley, *Governor*
Anthony G. Brown, *Lt. Governor*



James T. Smith, Jr., *Secretary*
Melinda B. Peters, *Administrator*

June 25, 2013

RE: Project No. PG618B21
MD 4 at Suitland Parkway Interchange
Prince George's County, Maryland
USGS *Upper Marlboro* 7.5' Quadrangle

Mr. J. Rodney Little
State Historic Preservation Officer
Maryland Historical Trust
100 Community Place
Crownsville MD 21032-2023

Dear Mr. Little:

This letter serves to provide the Maryland Historical Trust (MHT) with the draft Memorandum of Agreement (MOA) for the proposed SHA Project No. PG618B21, MD 4 over the Suitland Parkway. On July 9, 2010, MHT concurred with SHA's determination that the proposed directional ramp from northbound MD 4 to westbound Suitland Parkway would have an adverse effect on the National Register of Historic Places-listed (NRHP) Suitland Parkway. Suitland Parkway has been listed in the NRHP since June 2, 1995, and has received MIHP No. PG:76A-22. On August 11, 2011, SHA met with the National Park Service, National Capital Region (NPS-NCR) and the Federal Highway Administration (FHWA) to discuss the proposed MOA. The Suitland Parkway staff was also invited to attend the meeting, but did not participate. Since 2011, SHA, FHWA and NPS have held several meetings and also several telephone conferences to discuss the remaining issues that will be included in the MOA. SHA believes the MOA is complete and can be forwarded to MHT and the NPS-NCR as well as the NPS- National Capital Parks East for comment. The NPS is a consulting party in the MOA and both NPS offices have participated in the coordination meetings with SHA and FHWA.

Please examine the attached MOA. We request MHT's comments regarding it by July 25, 2013.

My telephone number/toll-free number is _____
Maryland Relay Service for Impaired Hearing or Speech 1.800.735.2258 Statewide Toll Free

Street Address: 707 North Calvert Street • Baltimore, Maryland 21202 • *Phone* 410.545.0300 • www.roads.maryland.gov

Mr. J. Rodney Little
MD 4 at Suitland Parkway
Page Two

Please call Anne E. Bruder at 410-545-8559 (or via email at abruder@sha.state.md.us) with questions regarding the documentation. Questions regarding archeology can be directed to Richard Ervin by telephone, 410-545-2878, (or via email at rervin@sha.state.md.us).

Very truly yours,



For

Digitally signed by April Fehr for
DN: cn=April Fehr for, o=SHA, ou=EPLD-
CRS, email=afehr@sha.state.md.us, c=US
Date: 2013.06.25 13:52:08 -04'00'

Julie M. Schablitsky
Assistant Division Chief
Environmental Planning Division

Attachment: 1) MD 4 at Suitland Parkway Memorandum of Agreement (DRAFT)

cc: Ms. Anne E. Bruder, SHA-EPLD
Mr. Richard G. Ervin, SHA-EPLD
Ms. Heather Lowe, SHA-EPLD
Mr. Moreshwar Kulkarni, SHA-OOS
Ms. Jeanette Mar, FHWA-DelMar Division
Ms. Keilyn Perez, FHWA-DelMar Division
Mr. Stephen Whitesell, NPS-NCR
Mr. Alex Romero, NPS-NCPE

Martin O'Malley, *Governor*
Anthony G. Brown, *Lt. Governor*



James T. Smith, Jr., *Secretary*
Melinda B. Peters, *Administrator*

June 25, 2013

RE: Project No. PG618B21
MD 4 at Suitland Parkway Interchange
Prince George's County, Maryland
USGS *Upper Marlboro 7.5'* Quadrangle

Mr. Stephen Whitesell
Regional Director, National Capital Region
ATTN: David Hayes
National Park Service
1100 Ohio Drive, SW
Washington DC 20242

Dear Mr. Whitesell:

This letter serves to provide the National Park Service, National Capital Region (NPS-NCR) and the National Capital Parks East (NPS-NCPE) including the Suitland Parkway with the draft Memorandum of Agreement (MOA) for the proposed SHA Project No. PG618B21, MD 4 over the Suitland Parkway. On July 9, 2010, the Maryland Historical Trust concurred with SHA's determination that the proposed directional ramp from northbound MD 4 to westbound Suitland Parkway would have an adverse effect on the National Register of Historic Places-listed (NRHP) Suitland Parkway. Suitland Parkway has been listed in the NRHP since June 2, 1995, and has received MIHP No. PG:76A-22. On August 11, 2011, SHA met with the National Park Service, National Capital Region (NPS-NCR) and the Federal Highway Administration (FHWA) to discuss the proposed MOA. The Suitland Parkway staff was also invited to attend the meeting, but did not participate. Since 2011, SHA, FHWA and NPS have held several meetings and also several telephone conferences to discuss the remaining issues that will be included in the MOA. SHA believes the MOA is complete and can be forwarded to MHT and the NPS-NCR as well as the NPS- NCPE for comment. The NPS is a consulting party in the MOA and both NPS offices have participated in the coordination meetings with SHA and FHWA.

Please examine the attached MOA. We request NPS-NCR and NPS-NCPE's comments regarding it by July 25, 2013.

My telephone number/toll-free number is _____
Maryland Relay Service for Impaired Hearing or Speech 1.800.735.2258 Statewide Toll Free

Street Address: 707 North Calvert Street • Baltimore, Maryland 21202 • *Phone* 410.545.0300 • www.roads.maryland.gov

Mr. Stephen Whitesell
MD 4 at Suitland Parkway
Page Two

Please call Anne E. Bruder at 410-545-8559 (or via email at abruder@sha.state.md.us) with questions regarding the documentation. Questions regarding archeology can be directed to Richard Ervin by telephone, 410-545-2878, or (via email at rervin@sha.state.md.us).

Very truly yours,


For

Digitally signed by April Fehr for
DN: cn=April Fehr for, o=SHA,
ou=EPLD-CRS,
email=afehr@sha.state.md.us, c=US
Date: 2013.06.25 14:08:13 -04'00'

Julie M. Schablitsky
Assistant Division Chief
Environmental Planning Division

Attachment: 1) MD 4 at Suitland Parkway Memorandum of Agreement (DRAFT)

cc: Ms. Anne E. Bruder, SHA-EPLD
Mr. Richard G. Ervin, SHA-EPLD
Ms. Heather Lowe, SHA-EPLD
Mr. Moreshwar Kulkarni, SHA-OOS
Ms. Jeanette Mar, FHWA-DelMar Division
Ms. Keilyn Perez, FHWA-DelMar Division
Mr. J. Rodney Little, MHT
Mr. Alex Romero, NPS-NCPE



U.S. Department
of Transportation
**Federal Highway
Administration**

DelMar Division

July 17, 2013

10 South Howard Street, Suite 2450
Baltimore, MD 21201
(410) 962-4440
(410) 962-4054
<http://www.fhwa.dot.gov/demddiv/>

In Reply Refer To:
HDA-MD
(PG618B21)

Mr. Reid J. Nelson
Director, Office of Federal Agency Programs
Advisory Council on Historic Preservation
1100 Pennsylvania Avenue, NW, Suite 809
Washington, DC 20004

Attention: Ms. Najah Duvall-Gabriel

Dear Mr. Nelson:

In accordance with 36 CFR §800.6, the Federal Highway Administration (FHWA) wishes to notify you that the subject project will have an adverse effect on the Suitland Parkway, Maryland Index of Historic Places (MIHP) No. PG:76A-22, which is a four-lane parkway that serves as the ceremonial entrance to Washington, DC from the Joint Base Andrews (formerly the Andrews Air Force Base). The Suitland Parkway intersects with MD 4 on the north side of Joint Base Andrews in Prince George's County, Maryland and is listed in the National Register of Historic Places (NRHP). A project location map is included as Enclosure 1. The Maryland State Highway Administration (SHA) proposes to construct a directional ramp from northbound MD 4 to westbound Suitland Parkway, which will require widening of the historic parkway, including the Suitland Parkway Bridge over the Joint Base Andrews' north entrance road. The undertaking would result in the construction of new highway appurtenances that are larger in scale and out of character for the parkway, and therefore, would have an adverse effect on historic properties.

Project Description

The purpose and need for the improvements to MD 4 from east of the I-95/I-495 Interchange to west of MD 223 are to improve safety and provide sufficient capacity to address existing and projected travel demands throughout the corridor. MD 4 connects southern Anne Arundel and Calvert counties with employment areas in Prince George's County and the District of Columbia. SHA proposes to make MD 4 a limited access highway by constructing interchanges at several intersections, including the MD 4 at Suitland Parkway intersection.

The Maryland State Highway Administration (SHA) proposes to construct a diamond

interchange for the MD 4-Suitland Parkway intersection by lowering MD 4 and by constructing ramp terminals with Suitland Parkway. In addition, to accommodate traffic volumes, a directional ramp from northbound MD 4 to westbound Suitland Parkway is proposed. This project will widen the historic parkway, including the Suitland Parkway Bridge over the Joint Base Andrews' north entrance road as well as construct a new bridge over the road from Joint Base Andrews to accommodate the directional ramp. The construction and widening would result in the construction of new highway appurtenances that are larger in scale and out of character for the parkway. Federal funds are anticipated for this project.

Area of Potential Effects

The Area of Potential Effects (APE) of this project was coordinated between the SHA and the Maryland State Historic Preservation Officer (MD SPO) on December 16, 1997 and again on March 31, 2010. The APE includes standing structures and the built environment in the immediate area of the proposed interchange, including the area into which elements could be introduced that would have the potential to affect characteristics qualifying resources for inclusion in the National Register of Historic Places, and to include the area of direct impacts of the proposed pipeline relocation, as indicated on the APE Map in Enclosure 2. The archeological survey area within the APE is defined as the limits of proposed construction where ground disturbance would occur.

Identification and Evaluation of Historic Properties

Architecture: SHA Architectural Historian Anne E. Bruder consulted the SHA-GIS Cultural Resources Database, reviewed the NRHP Nomination Form for the Suitland Parkway, and made a field visit on March 4, 2011. Suitland Parkway has been listed in the NRHP since June 2, 1995. The Suitland Parkway is a 9.18 mile four-lane road, divided by a grass median and surrounded by 418.9 acres of park in Maryland and the District of Columbia. The concrete rigid frame bridges that carry the Suitland Parkway over the various intersecting streets and highways are faced with dimensioned granite blocks on the abutments and the bridge over the Joint Base Andrews north entrance is completely faced with stone. The Suitland Parkway is an example of the City Beautiful Movement's emphasis on integrated urban green space, automobiles and road systems. It contributes to the historic symbolism and design of the Nation's capital as one of the capital region's parkways. The MD SHPO agreed with these findings on June 2, 1995.

Archeology: SHA archeologist Richard Ervin consulted the June 2009 Final Review plans, previous archeological studies, maps and aerial photographs, and the SHA-GIS Cultural Resources database. A field visit was made to the project area in early 2007. The Phase I survey of the MD 4 project corridor by Fiedel (1998) recorded no archeological sites and encountered considerable disturbance throughout the survey area.

Three other archeological studies within the survey area (Moeller et al. 1995, Child and Heidenrich 2004, Jones et al. 2002) recorded no archeological sites. A fourth survey by Banguilan and Boyd (2007) recorded six middle to late twentieth century archeological sites in or near the survey area (18PR843 to 18PR848). All six sites are described as disturbed, and are likely to have little research value.

Project plans have changed since Fiedel's 1998 survey through minor re-design of ramps and service roads. Based on the negative results of the 1998 survey and extensive disturbance throughout the survey area, the undertaking will not impact significant archeological sites. No further archeological work is warranted. The MHD SHPO agreed with these findings on July 9, 2010. (Enclosure 3).

Description of Alternatives and Assessment of Impacts

Improvements to Suitland Parkway will be limited to the addition of deceleration and acceleration lanes at the MD 4 interchange. The existing historic parkway bridge that carries Suitland Parkway over the Joint Base Andrews' north entrance will not be able to accommodate the proposed typical section of Suitland Parkway. The existing condition of Suitland Parkway is four 12-foot lanes (two in each direction) with a three-foot shoulder on each side and a five-foot median. However, the large amount of traffic turning right from eastbound Suitland Parkway to southbound MD 4 makes it essential to provide additional lanes over the bridge.

In the proposed typical section, the westbound direction of Suitland Parkway will be unchanged, but in the eastbound direction there will be four 12-foot lanes passing over the bridge; two through lanes, a combined through-right turn lane, and an exclusive right turn lane which will then split off after the bridge to proceed onto southbound MD 4 via Ramp K. The portion of Presidential Parkway (opposite Suitland Parkway) that is to the east of MD 4 will be modified and reconstructed to accommodate the change in profile and the acceleration and deceleration lanes from the interchange ramps. A bike path will be constructed on the north side of the interchange. The interchange will be designed to provide a symbolic entrance to the Nation's capital and to complement the historic character of the Suitland Parkway. Improvements to Suitland Parkway will be limited to the addition of deceleration and acceleration lanes at the MD 4 interchange. Specific design elements include extensive landscaping throughout the interchange, the reconstruction of a historic parkway bridge, and aesthetic treatment of new structures and ramps. The construction of the interchange will require 5.96 acres of perpetual easement and 9.55 acres of temporary easement for construction from the NPS property. No right-of-way will be acquired; however a perpetual easement is needed for all roadways, drainage facilities, and slopes that SHA will be required to maintain.

NuStar Energy, L.P. owns and operates an eight-inch high pressure petroleum products pipeline that services Andrews Air Force Base. The existing pipeline runs parallel to and across Suitland Parkway and MD 4. The interchange construction's project limits encompass approximately 8,800 linear feet of the existing NuStar pipeline, requiring several sections of the existing pipeline to be relocated.

Construction of SHA's MD 4-Suitland Parkway Interchange will require the alteration of the Suitland Parkway's eastern limits, since it will require the widening of the parkway where it intersects with MD 4, as well as the Suitland Parkway Bridge over the Joint Base Andrews entrance road, and the construction of a new overpass and ramp within Suitland Parkway's historic boundary. The new interchange will alter the design, materials, and setting of the Suitland Parkway and introduce new visual elements that are out of character for the parkway, thus meeting the requirements of the Criteria of Adverse Effect found at 36 CFR §800.5(a)(1). The MD SHPO agreed with these findings on July 9, 2010 (Enclosure 3).

Resolution of Adverse Effects

FHWA and SHA previously consulted with MD SHPO and the Advisory Council on Historic Preservation (ACHP) regarding this project between 1997 and 1999. Both MD SHPO and ACHP participated in the Memorandum of Agreement (MOA) at that time. Since then, SHA has revised its design and the MOA is no longer considered to be sufficient to address the nature of the undertaking or the impact on the historic property. A new MOA has been prepared and sent to the MD SHPO and NPS for comments on June 25, 2013.

Although SHA has sought ways to avoid or minimize the adverse impact, the proposed increases in traffic have precluded any changes in the design. As a result, SHA has prepared a draft Memorandum of Agreement (Enclosure 4) and included the following items as mitigation:

1. SHA shall develop and implement a landscape plan to provide an appropriate vegetative buffer within the MD 4-Suitland Parkway Interchange that will incorporate trees, shrubbery and other plants that are visually and historically compatible with the existing historic landscape of the Suitland Parkway.
2. SHA shall salvage and reuse the stone cladding from the historic bridge. If the original stone cannot be reused, new stone similar in color, size and shape will be acquired to clad the original Suitland Parkway bridge.
3. SHA shall provide slope stabilization at Suitland Parkway and Suitland Road.
4. SHA shall provide a bicycle trail along Suitland Parkway from the MD 4 interchange to Marlboro Pike to connect to a planned trail north of the interchange.
5. SHA shall purchase land adjacent to a National Park in the Capital Parks East region that will be commensurate with the amount of NPS land needed for the construction of the interchange within the Suitland Parkway's historic boundary. SHA is in the process of purchasing a 12.8 acre parcel on the east side of Fort Foote, a NPS property in Prince George's County on the Potomac River.


Consultation

In addition to coordinating with the MD SHPO, SHA and FHWA have been in consultation with the National Park Service (NPS) who maintains the Suitland Parkway. Two different NPS offices have been involved in the consultation. The NPS National Capital Region and the NPS National Capital Parks East, Suitland Parkway are jointly consulting with us regarding the project and its impacts to the historic property. The NPS also concurred with the adverse effect finding on March 24, 2008 (Enclosure 5) and again on May 27, 2009. FHWA and SHA held coordination meetings on June 2, 2010, February 28, April 28, June 21, July 29, August 18, and October 13, 2011, and on February 29, and December 6, 2012, with representatives from both offices of the NPS, and they continue to agree to the adverse effect finding and to provide information regarding the proposed mitigation items. No public meeting has been held since April 12, 2008.

- Please notify our office within 15 days of receipt of this letter whether or not you wish to participate in the resolution of adverse effects for this undertaking. If you require additional

information or clarification, please contact Ms. Jeanette Mar, at (410) 779-7152. Thank you for your assistance.

Sincerely,



Gregory Murrill
Division Administrator

Enclosures:

1. Location Map
2. Map of the APE
3. MHT Coordination
4. Revised Draft MOA
5. NPS Coordination

cc: Mr. J. Rodney Little, MHT

Dr. Julie Schablitsky, SHA-EPD

Ms. Anne E. Bruder, SHA-EPD



Preserving America's Heritage

July 26, 2013

Gregory Murrill
Division Administrator
FHWA – DelMar Division
10 South Howard Street, Suite 2450
Baltimore, MD 21201

Ref: *Proposed Construction of MD 4-Suitland Parkway Interchange
Prince Georges County, Maryland*

Dear Mr. Murrill:

The Advisory Council on Historic Preservation (ACHP) has received your notification and supporting documentation regarding the adverse effects of the referenced undertaking on a property or properties listed or eligible for listing in the National Register of Historic Places. Based upon the information provided, we have concluded that Appendix A, *Criteria for Council Involvement in Reviewing Individual Section 106 Cases*, of our regulations, "Protection of Historic Properties" (36 CFR Part 800), does not apply to this undertaking. Accordingly, we do not believe that our participation in the consultation to resolve adverse effects is needed. However, if we receive a request for participation from the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer, affected Indian tribe, a consulting party, or other party, we may reconsider this decision. Additionally, should circumstances change, and it is determined that our participation is needed to conclude the consultation process, please notify us.

Pursuant to 36 CFR §800.6(b)(1)(iv), you will need to file the final Memorandum of Agreement (MOA), developed in consultation with the Maryland State Historic Preservation Office (SHPO), and any other consulting parties, and related documentation with the ACHP at the conclusion of the consultation process. The filing of the MOA, and supporting documentation with the ACHP is required in order to complete the requirements of Section 106 of the National Historic Preservation Act.

Thank you for providing us with the notification of adverse effect. If you have any questions or require further assistance, please contact Najah Duvall-Gabriel at 202-606-8585 or at ngabriel@achp.gov.

Sincerely,

LaShavio Johnson
Historic Preservation Technician
Office of Federal Agency Programs

ADVISORY COUNCIL ON HISTORIC PRESERVATION

1100 Pennsylvania Avenue NW, Suite 803 • Washington, DC 20004
Phone: 202-606-8503 • Fax: 202-606-8647 • achp@achp.gov • www.achp.gov

Martin O'Malley, *Governor*
Anthony G. Brown, *Lt. Governor*



James T. Smith, Jr., *Secretary*
Melinda B. Peters, *Administrator*

May 27, 2014

RE: Project No. PG618C21
MD 4 at Suitland Parkway Interchange
Prince George's County, Maryland
USGS *Upper Marlboro* 7.5' Quadrangle

Mr. J. Rodney Little
State Historic Preservation Officer
Maryland Historical Trust
100 Community Place
Crownsville MD 21032-2023

Dear Mr. Little:

This letter serves to provide the Maryland Historical Trust (MHT) with the draft Memorandum of Agreement (MOA) for the proposed SHA Project No. PG618B21, MD 4 over the Suitland Parkway. SHA has funded the project for construction and we are providing MHT with a detailed project description including design refinements as part of the ongoing consultation. It is SHA's determination that the project will have an adverse impact on historic properties including the Suitland Parkway; SHA received MHT's concurrence on July 9, 2010. The MOA that was previously circulated on June 25, 2013 has been revised for a final review prior to signature. The copy provided with this letter as Attachment 1 addresses additional comments made by the National Park Service (NPS) and the Federal Highway Administration (FHWA). SHA is working closely with the NPS, both the National Capital Region and the National Capital Parks East, which manages the Suitland Parkway. Also included in the consultation are Joint Base Andrews, the Prince George's County Historic Preservation Commission, and Prince George's Heritage, Inc. SHA's proposed MOA is provided here for these agencies' comments. SHA's proposed project is to construct a grade-separated, signalized diamond interchange between MD 4 (Pennsylvania Avenue) and the Suitland Parkway, with a directional ramp at the intersection of MD 4 and Suitland Parkway/Presidential Parkway. The Suitland Parkway is listed in the National Register of Historic Places (NRHP) (PG:76A-22/NR-1175) and is located near Joint Base Andrews (JBA) in Prince George's County, Maryland.

Project Description:

SHA proposes to construct a grade-separated interchange at the intersection of MD 4 and Suitland Parkway/Presidential Parkway, involving improvements within the NRHP boundary of the Suitland Parkway, as depicted on the plans included as Attachment 2. The project will

My telephone number/toll-free number is _____

Maryland Relay Service for Impaired Hearing or Speech 1.800.735.2258 Statewide Toll Free

Street Address: 707 North Calvert Street • Baltimore, Maryland 21202 • *Phone* 410.545.0300 • www.roads.maryland.gov

include a directional overpass from MD 4 to the Suitland Parkway; a hiker-biker trail within the boundary of the JBA; relocation of the fuel line within both the Suitland Parkway boundary and JBA; a breakout utility project that will be constructed in advance of the actual interchange project on the east side of MD 4; stream restoration at the Marbury Stream mitigation site; and an exchange with NPS of lands near Fort Foote Park purchased by SHA for this purpose.

MD 4 (Pennsylvania Avenue) in Prince Georges County is a heavily traveled, four-lane north-south corridor. The Suitland Parkway interchange is one of three interchanges along MD 4 being designed to replace at-grade intersections between I-495 and MD 223. The proposed Suitland Parkway interchange configuration (Alternative 3) would construct a grade-separated, signalized diamond interchange with a directional ramp at the intersection of MD 4 and Suitland Parkway/Presidential Parkway. To accommodate the heavy left turn movement from MD 4 northbound to Suitland Parkway westbound, Ramp D would be a two-lane, free flow directional ramp that will include improvements within the NRHP boundary of the Suitland Parkway.

The existing condition of Suitland Parkway is four 12-foot lanes (two in each direction) with a three-foot shoulder on each side and a five-foot median. In the proposed typical section, the two 12-foot westbound lanes of Suitland Parkway would remain unaltered; however, in the eastbound direction the two existing 12-foot lanes would be widened to four 12-foot lanes. The four lanes will include two through lanes, a combined through right-turn lane, and an exclusive right turn lane which will then proceed onto southbound MD 4 via a channelized right-turn ramp.

As part of this interchange design, MD 4 would be widened to a three lane section with room in the median for a future additional lane. The centerline of MD 4 would be shifted approximately 75 feet east to reduce impacts to the Suitland Parkway. A four-way signalized intersection would be constructed with Suitland Parkway west of MD 4 to control traffic from the southbound MD 4 on- and off-ramps. The eastern leg of the interchange (existing Presidential Parkway) would be extended east as outlined in Prince George's County approved developer plans for the area. The extended east-west route would be renamed Central Park Drive. Presidential Parkway would be realigned to connect with Central Park Drive at an intersection east of the intersection with northbound MD 4 on- and off-ramps.

Improvements to the Suitland Parkway would be limited to raising the profile and widening Suitland Parkway to provide deceleration and acceleration lanes as it approaches MD 4. The large traffic volume from eastbound Suitland Parkway to southbound MD 4 requires the provision of additional lanes over the historic concrete arch Suitland Parkway Bridge, which would not be able to accommodate the proposed typical section. In order to provide additional lanes, the concrete arch bridge would be widened from 70 feet to 106 feet. To maintain the aesthetics and design features of the historic bridge, the existing stone-faced piers, abutments, wingwalls, parapets, and spandrels on the south elevation will be carefully removed and reused on the widened portion of the bridge. In the proposed typical section, the westbound direction of Suitland Parkway would be unchanged (two lanes), but in the eastbound direction there would be four 12-foot lanes passing over the bridge: two through lanes, a combined through-right turn lane, and an exclusive right turn lane which will then split off east of the bridge to proceed onto southbound MD 4 via Ramp K. The portion of Presidential Parkway to the east of MD 4 will be

modified and reconstructed to accommodate the change in profile and the acceleration and deceleration lanes from the interchange ramps. A bike path will be constructed on the north side of the interchange.

From the northbound MD 4 off-ramp, a two-lane directional ramp would be constructed to carry traffic from northbound MD 4 to westbound Suitland Parkway, crossing over existing Presidential Parkway then curving west to cross over MD 4, descending to a tie-in with westbound Suitland Parkway immediately west of the existing ramp from Old Marlboro Pike and the JBA North Gate.

To the north of the JBA North Gate, the existing ramp from Old Marlboro Pike to westbound Suitland Parkway would be removed along with the existing loop ramp from westbound Suitland Parkway to the JBA North Gate. Access to the JBA North Gate would be provided via a newly constructed road extending from the Old Marlboro Pike access road south, then under the directional ramp and the historic concrete arch Suitland Parkway Bridge to JBA North Gate. The existing ramp from JBA North Gate to southbound MD 4 via Suitland Parkway would be removed. Access to southbound MD 4 would be provided via an access road providing a connection to Old Marlboro Pike. This road would provide drivers with the option to continue onto southbound MD 4 via a right-hand turn. The access ramp from JBA North Gate to westbound Suitland Parkway would be reconstructed to align with the directional ramp tie-in to westbound Suitland Parkway.

The MD 4 and Suitland Parkway interchange will be designed to provide a symbolic entrance to the nation's capital and to complement the historic character of the Suitland Parkway. Specific design elements include extensive landscaping throughout the interchange, the reconstruction of a historic parkway bridge, and aesthetic treatment of new structures and ramps. The construction of the interchange will require the permanent transfer of approximately seven acres of perpetual easement from NPS to SHA, and an additional 18-acre temporary occupancy area required for construction from the NPS property. No right-of-way will be acquired; however a perpetual easement is needed for all roadways, drainage facilities, and slopes that SHA will be required to maintain.

Areas identified for perpetual easements from NPS include:

- The land that would be occupied by the directional ramp from MD 4 northbound to Suitland Parkway westbound as it traverses Suitland Parkway property, north of the Suitland Parkway mainline;
- Suitland Parkway approaches to the proposed interchange from immediately east of the bridge over the entrance ramp to JBA to the existing SHA ROW; and
- The land that would be occupied by the directional ramp connecting eastbound Suitland Parkway with southbound MD 4.

A Special Use Permit with NPS would provide for the 18-acre temporary occupancy area covering construction staging, grading and drainage, resurfacing and reconstruction of the approach roadways, construction of the bike/multi-use path, re-vegetation, post-construction vegetation monitoring, and invasive species management. There would be no permanent change

in the use of the temporary occupancy areas.

NuStar Energy, L.P. owns and operates an eight-inch high pressure petroleum products pipeline that services Andrews Air Force Base. The existing pipeline runs parallel to and along the north side of Suitland Parkway, then crosses under the Parkway and runs along the west side of MD 4. The Pipeline would be impacted by the proposed undertaking and would need to be relocated. The project limits of the interchange construction encompass approximately 8,800 linear feet of the existing NuStar pipeline, requiring several sections to be relocated. Permit plates showing the pipeline relocation are included as Attachment 3. Please note that due to security concerns, the plans may not be disseminated to the public.

The utility breakout project provides for the construction of a utility corridor east of MD 4 at Suitland Parkway, as depicted on the plans included as Attachment 4. The work is mainly along the service road to the east of MD 4. It starts north of the intersection with Machinists Place/Pennsylvania Avenue Service Road and continues to just south of the Westphalia Rd/ MD 4 intersection. The total length of the corridor is about 3,330 feet. The work consists of constructing a graded and stabilized access road that will facilitate utility relocations by others. The project also involves demolition of a building (formerly owned by Walton Westphalia, Item 99976, plat # 57640) and removal of pavement from the parking lot. The lot would be removed and graded. The work will consist of, but will not be limited to: clearing and grubbing; earthwork (compaction, borrow and excavation); drainage structures; building demolition and disposal; pavement removal; erosion and sediment control; maintenance of traffic; Geogrid installation; temporary traffic control; landscaping; and incidentals necessary to complete the utility work.

The Marbury Stream Restoration project will provide offsite mitigation for the MD 4 at Suitland Parkway project. Mitigation will consist of stream stabilization and buffer plantings. The site is within the developed residential neighborhood of District Heights, between eastbound and westbound Marbury Drive, and measures approximately 60 feet wide by 2500 feet long (Attachment 5). Land use along the stream consists of maintained lawns with some sparsely scattered trees, primarily at the top of the slope, closest to the roadway. As such, the trees provide no stream buffer or shading.

SHA intends to design and implement a more natural setting to replace the existing, maintained stream. The work will involve buffering the stream channel with native plantings to provide shade. All vegetation would be native and appropriate for the Coastal Plain physiographic province of Maryland. Trees selected for the planting design would meet an average maximum height requirement, as suggested by SHA and Prince George's County, to minimize the viewshed impact to the properties surrounding the study site. Recommended plantings include herbaceous species such as soft rush and Joe Pye Weed. SHA plans to coordinate with the surrounding community (or representatives from the County) to incorporate the community's plant preferences into the design. Riffle grade controls will be installed, a failing weir will be removed, and stormwater treatment bars will be installed at each of eight outfalls located along the stretch of stream.

Community enhancement features under consideration include a pedestrian bridge, street trees, additional lighting, benches, trash cans, and an educational or town gateway sign. No property will be acquired. The site is located entirely within Prince George's County right-of-way.

Funding

Federal funds are anticipated for this project.

Prior Coordination

On December 16, 1997, SHA determined that the proposed interchange between MD 4 and the Suitland Parkway would have an adverse effect on historic properties. The Maryland Historical Trust (MHT) concurred with the determination on March 6, 1998. In 1999, the Federal Highway Administration (FHWA), MHT, and the National Park Service (NPS) executed an MOA to resolve adverse effects. The 1999 MOA has been superseded by the draft MOA included as Attachment 1 based on subsequent changes to the design of the proposed interchange since 1999. The project will continue to have an adverse effect on the Suitland Parkway, as indicated in SHA's most recent letter to MHT dated March 31, 2010. MHT concurred with the continued adverse effect determination on July 9, 2010.

Area of Potential Effects

In determining the Area of Potential Effects (APE) for this project, SHA considered possible visual, audible, atmospheric and/or physical impacts to historic properties, both archaeological sites and standing structures that would diminish any National Register of Historic Places (NRHP) qualifying characteristic of the historic property's integrity. The project will require additional right-of-way as well as perpetual and temporary easements. The APE includes the historic standing structures within or immediately facing the highway, interchange, and/or access road. The APE for the stream restoration project will be confined to the limits of disturbance of the mitigation project, since the work will be at or below grade of the road. The archaeology survey area within the APE is defined as the limits of construction where ground disturbance would occur. The discontinuous APE is indicated on the attached USGS quadrangle maps for Upper Marlboro in Attachment 6 (6A and 6B).

Identification Methods and Results

Potentially significant architectural and archaeological resources were both researched as part of the historic investigation instigated by the proposed interchange construction project.

Architecture: SHA Architectural Historian Anne E. Bruder consulted the SHA-GIS Cultural Resources Database, NRHP and MIHP forms, the Integrated Cultural Resources Management Plan, Andrews Air Force Base, Maryland (US Army Corps of Engineers 2009), Washington Parkways Historic Resources Studies (Krakow 1990) and photographs at the SHA library and made field visits on May 12 and 13, 2014 to JBA, Suitland Parkway and District Heights to view the project areas. In addition, Ms. Bruder regularly has attended team meetings with FHWA and the NPS to discuss the project.

The APE for this project includes both the Suitland Parkway, PG:76A-22, which is listed in the NRHP, and JBA (formerly Andrews Air Force Base) which contains historic standing structures that are confined to the west side of the base. SHA's project will impact the east end of the Suitland Parkway and the northern and eastern portions of JBA.

As noted above, SHA previously determined that the proposed alterations to the east end of the Suitland Parkway in order to create a signalized diamond interchange with a directional ramp would have an adverse impact on historic properties, including the Suitland Parkway. Additional project elements such as a hiker-biker trail and the fuel line will be constructed within the boundaries of JBA. However, this work will be an in-kind replacement of an existing trail and pipe. There are no historic standing structures in the APE within JBA. Likewise, SHA proposes to install an access road along the east side of MD 4 in order to relocate utilities associated with the MD 4/Suitland Parkway project. During SHA's May 13, 2014 field visit, the Samuel T. Wood Property, a former farm that has been converted to an industrial complex was identified. The property is largely overgrown, but several outbuildings are visible. SHA took photographs and has determined that the Samuel T. Wood Property lacks integrity of design, workmanship, feeling and association. Additional research did not identify events, persons or architectural designs that meet the requirements of NRHP Criteria A (events), B (persons) or C (architecture) of state, local or national significance. As a result, SHA has determined that the Samuel T. Wood Property is not eligible for inclusion in the NRHP. A short form DOE along with photographs and a location map are included in Attachment 7.

On May 12, 2014, SHA also made a field visit to District Heights to view the proposed Marbury Stream Restoration project location. The Prince George's County Historic Preservation Office has a written evaluation of the District Heights Survey Area, PG:75A-057. The District Heights Survey Area consists of 1,328 primary resources that were constructed between the 1920s and the 1960s. Near the stream, the houses are typical post-World War II suburban residential examples of raised ranch, split level and ranch houses constructed between 1958 and 1965. Given the large number of resources in the survey area and the confined APE, SHA has not evaluated any of the houses facing the Marbury Drive Stream Restoration. None of the houses are on the stream's banks, but all are separated by the eastbound and westbound streets on either side of the stream and plantings on the individual lots. As a result, there is a very limited viewshed of the stream from any house facing the stream.

The stream is an unnamed tributary to the southwest branch of the west branch of the Patuxent River which has been channelized as a result of residential and street construction. It is surrounded by grass on the embankments with trees standing near the streets on either side. SHA will provide new plantings and a pedestrian bridge crossing the stream that will not introduce any new visual elements to the stream area that are out of character with the neighborhood. SHA makes this determination since the work will be at or below the grade of the surrounding roads. There are no historic standing structures in the APE and the proposed stream improvements will have no impact on historic standing structures.

As noted above, SHA's proposed project, MD 4 at Suitland Parkway Interchange will have an adverse impact on the Suitland Parkway, a historic property. SHA's proposed MOA to address the adverse effect includes items that have long been discussed by the consulting parties, including reconstruction of the historic Suitland Parkway Bridge over the JBA entrance ramp, as well as the low guard wall which separates the entrance and exit ramps leading from the JBA gate. The MOA is included for your review and comment (Attachment 1). We hope to complete the review so that we can move forward with executing the agreement. The version provided includes comments made by the NPS and FHWA.

Archaeology: SHA archaeologist Richard Ervin assessed design changes to the MD 4 at Suitland Parkway interchange project, including the current design of the NuStar pipeline relocation, the MD 4/Suitland Parkway breakout utility project, and the Marbury stream mitigation site. The assessment was based on review of previous archaeological studies, topographic and soils maps, aerial photographs, and examination of the SHA-GIS Cultural Resources database. Field visits were made to the project area in 2007 and 2012.

GIS shapefiles for the 8-Inch Pipeline Relocation at about 70% design completion, provided in April 2014, were used to assess potential impacts of the proposed pipeline relocation. The archaeology survey area of the Pipeline Relocation is defined as the additional limits of proposed construction, where ground disturbance would occur. Final Plans at 95% completion were used to assess the potential impacts of the breakout utility project. The survey area of the breakout utility project is also defined as the additional limits of proposed construction, where ground disturbance would occur.

The MD 4/Suitland Parkway archaeology survey area crosses gently sloping terrain cut by several tributaries of Cabin Branch, which flow to the east. At the west end of the survey area, the headwaters of Henson Creek parallel the east end of the Suitland Parkway. Soils are part of the Beltsville-Leonardtown-Chillum association, moderately deep, gently sloping, well-drained to poorly drained soils with a compact substratum.

Fiedel (1998) surveyed the MD 4 project corridor from east of I-95 to west of MD 223. Extensive shovel testing, which was concentrated near the proposed MD 4/Suitland Parkway interchange and at the northern and southern termini of the survey area, recorded no archaeological sites, and indicated considerable disturbance throughout the survey area.

Moeller et al. (1995) conducted Phase I survey of Andrews Air Force Base, now JBA, and Child and Heidenrich (2004) conducted survey of the areas at the northern perimeter of the Base for a safety zone tree control project. The former study recorded several historic period sites (18PR443 to 18PR446, and 18PR448) and one prehistoric site (18PR447) on the Air Force Base property; Child and Heidenrich (2004) recorded no archaeological sites. None of the recorded sites are in the archaeological survey area for the MD 4 at Suitland Parkway interchange or the proposed gas line relocation.

Other parts of the archaeology survey area were examined by Jones et al. (2002; survey of Suitland Parkway); and by Banguilan and Boyd (2007; survey of the Westphalia Center tract). A series of five adjacent late historic period archaeological sites (18PR843 to 18PR847) were recorded in the larger MD 4 Suitland Parkway interchange survey area by Banguilan and Boyd (2007). The sites are a series of middle to late twentieth century house sites described as disturbed (Banguilan and Boyd 2007) by building construction and their recent demolition. The poor integrity of the sites, together with their recent age, suggests little research value.

No archeological sites have been recorded in the survey area of the NuStar Pipeline Relocation, which was examined by Moeller et al. (1995) and Fiedel (1998). The proposed pipeline alignment follows the south side of the Suitland Parkway, crossing into the northern edge of the JBA property, then following the west side of existing MD 4. The additional impacts caused by the NuStar pipeline relocation are minor, and primarily occur within areas disturbed by road and associated utility construction, commercial development, and development of JBA. Disturbance is indicated by mapped soils in the additions to the survey area, which are (from west to east) as Potobac-Issue complex, frequently flooded; Beltsville silt loam; Beltsville-Urban Land complex; Woodstown sandy loam; Udorthents, highway; Grosstown gravelly silt loam; Grosstown-Urban Land complex; Marr-Dodon complex; Marr-Dodon Urban Land complex; and Udorthents.

Parts of the breakout utility project survey area were examined by Fiedel (1998) and Banguilan and Boyd (2007), who recorded one site in the survey area, 18PR845, one of a series of middle to late twentieth century house sites (Banguilan and Boyd 2007). The refinement is located east of MD 4, in terrain characterized by a mix of grassed areas; forested terrain; and areas disturbed by twentieth century residential and commercial properties, residential demolition, and light industrial activity. Soils in the addition to the survey area for the breakout Utility project are mapped as well-drained Marr-Dodon complex; Sassafras-Urban Land complex; Marr-Dodon fine sandy loam, 0- 5% slopes; and Udorthents, highway.

Archaeological site 18PR845, which would be impacted by the breakout utility project, was determined not eligible for the NRHP on April 3, 2007 according to the DOE database. Based on the negative results of previous archaeological investigations in the survey area, and the extensive disturbance documented throughout the archaeological survey area, the proposed design changes from the pipeline relocation and the breakout utility project will not impact significant archaeological sites. No further archaeological work is warranted.

For the proposed Marbury Stream Restoration project, the survey area is defined as the limits of proposed construction, where ground disturbance would occur. No archaeological surveys have been done, and no archaeological sites have been recorded in the survey area, which is a channelized stream flanked by middle twentieth century suburban development. The stream was channelized and straightened as part of twentieth century residential development. Based on prior disturbance and the minor scope of construction, which will be confined to the graded streambanks, the undertaking will not impact significant archaeological sites. No further archaeological work is warranted.

Review Request

Please examine the attached maps, plans, short form DOE with attachments, and Eligibility and Effects Table (Attachment 8), along with the attached MOA. We request any comments that MHT may have by June 25, 2014. We also request your concurrence with our eligibility and impact determinations on project design changes, and our determination that there would continue to be adverse effects on the Suitland Parkway, an historic property by the construction of the MD 4 at Suitland Parkway Interchange. By carbon copy, we invite the National Park Service, both the National Capital Region and the National Capital Parks East, Prince George's County Historic District Commission, Prince George's Heritage, Inc., and the Maryland Commission on Indian Affairs to provide comments and participate in the Section 106 process. Relevant federally recognized tribes will also be invited to consult. Pursuant to the requirement of the implementing regulations found at 36 CFR Part 800, SHA seeks their assistance in identifying historic preservation issues as they relate to this specific project (see 36 CFR §800.2(c)(4) and (6), and §800.3(f) for information regarding the identification and participation of consulting parties, and §800.4, and §800.5 regarding the identification of historic properties and assessment of effects). For additional information regarding the Section 106 regulations, see the Advisory Council on Historic Preservation's website, www.achp.gov, or contact the Maryland State Highway Administration or the Maryland Historical Trust). If no response is received by June 25, 2014, we will assume that these offices decline to participate. Please contact Ms. Anne E. Bruder at 410-545-8559 (or via email at abruder@sha.state.md.us) with questions regarding standing structures for this project. Mr. Richard G. Ervin may be reached at 410-545-2878 (or via email at rervin@sha.state.md.us) with concerns regarding archaeology.

Very truly yours,



Digitally signed by April Fehr for
DN: cn=April Fehr for, o=SHA,
ou=EPLD-CRS,
email=afehr@sha.state.md.us, c=US
Date: 2014.05.27 16:09:52 -04'00'

Julie M. Schablitsky
Assistant Division Chief
Environmental Planning Division

Attachment: 1) MD 4 at Suitland Parkway Memorandum of Agreement (DRAFT)
2) Project Plans, MD 4 at Suitland Parkway
3) Project Plans, NuStar Pipeline Relocation
4) Project Plans, Breakout Utility Project
5) Location Map, Marbury Stream Restoration
6) APE Maps 6A and 6B
7) DOE Short Form with photographs and map
8) Eligibility and Effects Table

Mr. J. Rodney Little
MD 4 at Suitland Parkway Interchange
Page 10

cc: Ms. Katherine Birmingham, NPS-NCPE
Ms. Anne E. Bruder, SHA-EPLD
Mr. E. Keith Colston, Administrator, Maryland Commission on Indian Affairs
Mr. Richard G. Ervin, SHA-EPLD
Mr. Joel Gorder, NPS-NCR
Mr. Moreshwar Kulkarni, SHA-OOS
Ms. Heather Lowe, SHA-EPLD
Ms. Jeanette Mar, FHWA-DelMar Division
Mr. Robert Mocko, NPS-NCPE
Ms. Alexis Morris, RK&K
Ms. Keilyn Perez, FHWA-DelMar Division
Ms. Tammy Stidham, NPS-NCR

**Concurrence with the MD State Highway Administration's
Determination(s) of Eligibility and/or Effects**

Project Number: PG618C21

MHT Log No. _____

Project Name: MD 4 at Suitland Parkway Interchange

County: Prince George's

Letter Date: May 22, 2014

The Maryland Historical Trust has reviewed the documentation attached to the referenced letter and concurs with the MD State Highway Administration's determinations as follows:

Eligibility (as noted in the Eligibility Table [Attachment 8]):

- ☐ Concur
- ☐ Do Not Concur

Effect (as noted in the Effects Table [Attachment 8]):

- ☐ No Properties Affected
- ☐ No Adverse Effect
- ☐ Conditioned upon the following action(s) (see comments below)
- ☐ Adverse Effect

Comments:

By:

MD State Historic Preservation Office/
Maryland Historical Trust

Date

Return by U.S. Mail or Facsimile to:
Dr. Julie M. Schablitsky, Assistant Division Chief, Environmental Planning Division,
MD State Highway Administration, P.O. Box 717, Baltimore, MD 21203-0717
Telephone: 410-545-8870 and Facsimile: 410-209-5046

Mr. J. Rodney Little
MD 4 at Suitland Parkway Interchange
Page 12

Attachment 8: Hybrid Eligibility/Effects Table

Project Name: MD 4 at Suitland Parkway Interchange

May 27, 2014

Resource	Type	SHA NR Det.	SHPO Opinion	Alternative #		Attachment	Remarks
				Impact	SHPO Concur		
Suitland Parkway, PG:76A-22.NR-1175	HD	NRL 6/2/1995	NRL 6/2/1995	Adverse	Requested 5/2014		
Samuel T. Woods Property, 8600 Pennsylvania Avenue	S	X	Requested 5/2014	None	Requested 5/2014	7	
Effect				AE	Requested 5/2014		

Codes:

Resource Types: S (Structure), A (Archaeological Site), HD (Historic District), NHL (National Historic Landmark)
 NR Determination: ND (Not Determined), X (Not Eligible), NR (Eligible), NHL (Listed), NHL (Landmark)
 SHPO Opinion: (B) designates opinion regarding boundary, Code following date signifies SHPO opinion
 Impact: None, No Adverse, Adverse
 Effect: NPA (No Properties Affected), NAE (No Adverse Effect), AE (Adverse Effect)
Bold rows indicate review action requested

APPENDIX C:

Draft Memorandum of Agreement

**MEMORANDUM OF AGREEMENT AMONG
THE FEDERAL HIGHWAY ADMINISTRATION,
THE NATIONAL PARK SERVICE,
THE MARYLAND STATE HISTORIC PRESERVATION OFFICER
AND THE MARYLAND STATE HIGHWAY ADMINISTRATION
PURSUANT TO 36 CFR 800 REGARDING
CONSTRUCTION OF THE MD 4/SUITLAND PARKWAY
INTERCHANGE
IN PRINCE GEORGE’S COUNTY, MARYLAND**

WHEREAS, the Federal Highway Administration (FHWA) proposes to assist the Maryland State Highway Administration (MD SHA) with the improvements to the MD 4/Suitland Parkway Interchange in Prince George’s County (Undertaking); and

WHEREAS, after detailed study of alternatives, the MD SHA has selected the following Preferred Alternative for construction: MD 4/Suitland Parkway Diamond Interchange with a directional ramp; and

WHEREAS, the FHWA has determined that the Undertaking will have an adverse effect on Suitland Parkway (MIHP No. PG: 76A-22), which is listed in the National Register of Historic Places (NRHP) under Criteria A and C; and

WHEREAS, the FHWA has consulted with the Maryland State Historic Preservation Officer (MD SHPO) pursuant to 36 CFR Part 800, the regulations implementing Section 106 of the National Historic Preservation Act (16 USC 470f); and

WHEREAS, pursuant to 36 CFR §800.6, FHWA has invited the National Park Service (NPS) to participate as a consulting party and to concur in this Memorandum of Agreement (MOA); and

WHEREAS, the NPS owns in fee the property on the west side of MD 4 which contains the Suitland Parkway including the MD 4 directional ramp, and will undertake a land exchange with the MD SHA of lands in the amount of 7.0 Acres required for construction, operations and maintenance of the bridges, ramps and landscaping; will issue a permit for construction of the interchange; and will issue an Archeological Resources Protection Act (ARPA) permit, if needed; all constituting Federal undertakings by the NPS; and

WHEREAS, the NPS owns in fee the property which contains and will continue to contain the Suitland Parkway bridge over the Joint Base Andrews’ North Gate ramps, and will undertake a temporary transfer of jurisdiction, for nine (9) years including four years of construction and five years for post-construction landscape maintenance, for access and construction to the MD SHA of lands in the amount of 9.5 Acres, also all constituting a Federal undertaking by the NPS, and

WHEREAS, the MD SHA has participated in consultation, has responsibilities for implementing stipulations under this MOA, and has been invited to be a signatory to this MOA; and

WHEREAS, the MD SHPO agrees that fulfillment of the terms of this MOA will satisfy the responsibilities of any Maryland state agency under the requirements of the Maryland Historical Trust Act of 1985, as amended, State Finance and Procurement Article §§ 5A-325 and 5A-326 of the Annotated Code of Maryland, for any components of the Undertaking that require licensing, permitting, and/or funding actions from Maryland state agencies; and

WHEREAS, the FHWA has notified the Advisory Council on Historic Preservation (Council) of the adverse effect determination, and it has declined to participate in the consultation; and

WHEREAS, the MD SHA held a public meeting on April 12, 2008, and notified the public through newsletter(s) and posting of NEPA documentation on the SHA Project and NPS PEPC websites; and

NOW THEREFORE, the FHWA, NPS, MD SHPO and MD SHA agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

STIPULATIONS

FHWA and MD SHA will ensure that the following measures will be implemented::

I. Mitigation Measures for Suitland Parkway (MIHP No. PG:76A-22)

- A. Treatment of Historic Suitland Parkway Bridge over Entrance Ramp to Joint Base Andrews North Gate and Ramp Salvage and Reuse of Stone
 1. MD SHA shall require its Contractor to salvage and reuse the stone cladding from the historic bridge and the stone guard wall on the ramp. Each stone will be cleaned, stockpiled and reset on the new portion of the bridge in the same manner as the historic bonding pattern. If, during removal, any stone is lost or damaged, the Contractor will be responsible for obtaining stone similar in color, size, shape and integrity to complete the design.
 2. Interim Protection of Stone – Following the removal of the stone cladding from the historic bridge and wall, the Contractor will be responsible for storing the cleaned stone in a secure location until it is reset on the historic Suitland Parkway Bridge.
 3. New Stone for Suitland Parkway Bridge and Ramp -- If it is not possible to remove the stone cladding from the historic bridge and/or wall, MD SHA shall require its Contractor to obtain new stone for the cladding that matches the original in color, size and shape from the quarry originally used by the NPS.

4. Selection of Stone for Suitland Parkway Bridge and Ramp Wall
 - 1) The Contract documents will
 - a. Require that the Contractor obtain stone from a Maryland quarry which has previously supplied stone for the masonry work on the Suitland Parkway bridges; and
 - b. FHWA and MD SHA will provide NPS and MD SHPO with the opportunity to make the stone selection. The name of the stone quarry will be included in the Contract Documents.
 - 2) Any stone that is purchased will be selected based upon a comparison by FHWA, NPS, MD SHPO and MD SHA of the original stone on the Suitland Parkway Bridge as specified in the Contract Documents.
 - 3) In the event that MD SHA is unable to provide comparable stone, MD SHA will make an effort to find an alternative supplier with NPS approval.
 - 4) Mortar Joints – The mortar used by the Contractor to reset the stone cladding on the south side of the historic Suitland Parkway Bridge will match in color and texture the original mortar on the south side of the bridge, will have greater vapor permeability and be softer (measured in compressive strength) than the masonry units, and will be recessed to the same depth from the stone surface as the current mortar on the south side of the bridge.
 - 5) Qualified Mason – All work resetting the stone façade on the historic bridge will be completed by a mason who has a minimum of five (5) years of experience with repointing of historic masonry bridges (NPS Preservation Brief 2).
 - 6) Samples of Bonding Pattern and Mortar – MD SHA shall make three samples of the historic bridge's bonding pattern and mortar available to the MD SHPO and NPS for inspection and approval prior to installation by the qualified Mason. Information about the requirements for the three samples and notification of the parties will be found in the Contract Documents.
 - 7) Contract Documents –The requirements of Stipulations 1)a)(1)-(6) will be included in MD SHA's Project Construction Contract and Plans.
- B. Treatment of New Bridge within Suitland Parkway Boundary over Exit Ramp from Joint Base Andrews North Gate (Bridge No. 1630000, Ramp D over Ramp J)
 - 1) New Bridge Design – MD SHA will design a concrete slab bridge for the MD 4 Directional Ramp D over Ramp J within the Suitland Parkway's NRHP boundary and the exterior of the parapets as well as the abutments will be clad with a stone and mortar bonding pattern that is similar to, but does not replicate the pattern of the historic Suitland Parkway Bridge.

2. Stone Cladding – MD SHA will provide new stone for the cladding that is similar to color, size and shape of the stone used for the historic Suitland Parkway Bridge.
 - a) Any stone that is purchased will be selected based upon a comparison by FHWA, NPS, MD SHPO and MD SHA of the original stone on the Suitland Parkway Bridge as specified in the Contract Documents.
 - b) The name of stone required will be included in MD SHA's Contract Documents, and the stone will be purchased from the same quarry as any stone for the Suitland Parkway bridge.
3. Samples of Bonding Pattern and Mortar – MD SHA shall make three samples of the new bridge's bonding pattern and mortar available to the MD SHPO and NPS for inspection and approval prior to installation by the Mason.
4. Qualified Mason – All work setting the stone façade on the new bridge will be completed by a Mason who has at least five (5) years of experience with the pointing of stone structures.
5. Contract Documents -- The requirements of Stipulations 1)b)(1)-(4) will be included in SHA's Project Construction Contract and Plans.

C. Vegetation Maintenance

1. New Landscaping within Suitland Parkway Boundary – MD SHA shall, in consultation with the MD SHPO and NPS, develop and implement a landscape plan to provide an appropriate vegetative buffer within the MD 4/Suitland Parkway Interchange, consistent with the proposal entitled "Suitland Parkway Landscape Plan." The proposed trees and vegetation on NPS lands have been selected from a list provided by NPS. The Suitland Parkway Landscape Plan will incorporate grading and planting trees, shrubbery and other plants that are visually and historically compatible with the existing historic landscape of the Suitland Parkway.
2. Vegetation Maintenance – MD SHA shall, in consultation with the MD SHPO and NPS, develop and implement a five year vegetation maintenance plan that will include an invasive plant removal plan for the area within the MD 4/Suitland Parkway project limits. The "Vegetative Removal Plan" will be provided separately from the interchange landscape plans.
3. Implementation – MD SHA shall implement the approved landscape maintenance plans after the completion of construction of the Undertaking, and shall start the work following the completion of the Interchange construction. The landscape installation will commence as soon as seasonal planting is recommended.

4. Maintenance – MD SHA will maintain the newly planted landscape features for five (5) years following installation. Maintenance will include, but is not limited to replacing dead plants in-kind and watering, monitoring and removal of invasive species.
5. Pedestrian Trail – MD SHA shall provide a bicycle trail along westbound Suitland Parkway from Presidential Parkway to Old Marlboro Pike. A plan for the trail will be provided to the MD SHPO and NPS with the 90% final design plans for review.
6. Decorative Fencing – MD SHA shall provide decorative safety fencing along the parapets of the Suitland Parkway Bridge over MD 4 (SHA Bridge No. 1629700) outside the Suitland Parkway NRHP Boundary.
7. Decorative Finish – Outside of the Suitland Parkway NRHP boundary, MD SHA shall provide a surface applied stain to the exterior bridge concrete surfaces on the MD 4 ramps visible from Suitland Parkway and other aesthetic treatments to the median on Suitland Parkway over MD 4 consistent with the historic nature of the Suitland Parkway.
8. Traffic Barrier – MD SHA shall provide a steel-backed timber traffic barrier within the Suitland Parkway NRHP boundary.
9. Highway Signage – MD SHA shall provide design and location information for any highway signs within the Suitland Parkway NRHP boundary.
10. Landscape Plans – MD SHA shall provide the landscape plan and the vegetation removal plan.
11. Lighting – MD SHA shall provide the type of lighting within the Suitland Parkway NRHP boundary and each location.
12. Utilities – MD SHA shall provide design and location information for any utilities within the Suitland Parkway NRHP boundary.
13. MD 4/Suitland Parkway Interchange Design Plan Review – MD SHA shall provide a copy of the interchange design plans, including the designs for the historic bridge, new bridges and ramps, lighting and landscaping, as part of the 90% final design plans for approval by the MD SHPO and NPS. If the MD SHPO and/or the NPS do not provide approval of the plans within 30 calendar days after receipt of said plans, SHA may assume concurrence and may proceed with the project. The 90% plans will address the following features:

II. **Modifications** – MD SHA shall coordinate any change, modification, or refinement to the design or scheduling of this Undertaking that may potentially impact the viewshed of the Suitland Parkway with the MD SHPO and the NPS at that time, in accordance with the provisions of Stipulation 2 below.

III. **Design Development, Alignment Modifications and Ancillary Activities**

A. The project may result in unforeseen effects on other historic properties due to changes made during design development, alignment modifications, or as a result of

associated ancillary activities including, but not limited to: construction staging areas, stormwater management facilities, wetland mitigation areas, reforestation areas, environmental stewardship activities, or other actions. All design and construction elements that may affect historic properties will be subject to review and concurrence by the MD SHPO and the NPS. The FHWA and the MD SHA will ensure that avoidance of adverse impacts to historic properties is the preferred strategy and will utilize all feasible, prudent, and practicable measures to avoid adverse impacts.

1. Should activities be added to the Undertaking for which cultural resources studies have not been completed, the MD SHA shall ensure that consultation ensues with the MD SHPO, the FHWA, NPS, and other relevant consulting parties as appropriate, and that all required cultural resources studies are implemented in accordance with the applicable performance standards in Stipulation V and with the following procedures:

- a) Identification -- The MD SHA professional cultural resources staff shall review any additions or changes to the project and implement identification investigations as necessary to identify any historic properties that may be impacted by the proposed activity or alignment modification. The MD SHA shall provide all completed information to the MD SHPO, the FHWA, NPS, and relevant consulting parties under this MOA for review and comment.
- b) Evaluation -- The MD SHA shall evaluate all cultural resources identified in the areas inventoried under Stipulation II.(1)a) in accordance with 36 CFR 800.4(c) to determine their eligibility for the National Register of Historic Places. The MD SHA shall provide the results of any such evaluation efforts to the MD SHPO, the FHWA, NPS, and relevant consulting parties for review and comment.

(1) Treatment -- Should any property eligible for inclusion in the National Register of Historic Places be identified under Stipulation II.(1)a), the MD SHA shall make a reasonable and good-faith effort to avoid adversely impacting the resource(s) by relocating or modifying the proposed action. If adverse impacts effects are unavoidable, the MD SHA, the FHWA, the MD SHPO, NPS and relevant consulting parties shall consult in accordance with 36 CFR 800.6 to resolve adverse effects on National Register-eligible historic properties. The FHWA shall solicit the participation of the Council. If adverse effects are unavoidable, the MD SHA, the FHWA, the MD SHPO, NPS and relevant consulting parties shall develop and implement appropriate treatment options in a Memorandum of Agreement. The FHWA and the MD SHA shall implement the mitigation plan once the MD SHPO concurs with the plan. The MD SHA shall ensure that any resulting cultural resources work is accomplished in accordance with the relevant performance standards in Stipulation VI.A.

IV. Unanticipated Discovery of Historic Properties

A. Prior to the construction/implementation phase of the project, and before all/any ground disturbing activities occur within lands owned by the NPS, specifically National Capital Parks-East/Suitland Parkway, the SHA Archaeologist will hire an archaeological contractor meeting the Secretary of Interior's Standards, and will apply for an ARPA permit through the NPS NCR Regional Archaeologist in case of any inadvertent discovery due to project construction. The SHA Archaeologist and the archaeological contractor shall be available to conduct any required archaeological investigations on NPS lands, under the direction of the Park Archaeologist and the Regional Archaeologist.

B. Should any human remains be encountered, all construction excavations will immediately stop, and the SHA Construction Engineer shall immediately notify the Park Superintendent (202) 692-6000, Park Archaeologist (202) 692-6038, Regional Archaeologist (202) 619-7280, MD SHPO (410-514-7630), and the SHA Archaeologist (410) 545-2878. The Park Superintendent, in consultation with the Park and Regional Archaeologists, and Maryland SHPO, shall determine the appropriate course of action, following the Department of the Interior's guidelines on human remains.

C. Should any previously unidentified archaeological sites or materials be encountered, excavations will stop and the Park Superintendent, Park Archaeologist, Regional Archaeologist, Maryland SHPO, and the SHA Archaeologist will be notified immediately. The Regional and Park Archaeologists will determine the appropriate course of action with the SHA Archaeologist; additional specifications are spelled out by the NPS in the "Special Stipulations" section of the approved ARPA permit that will be issued by the Regional Director, and within the "Plan for Treatment of Unanticipated Historic Properties on Lands owned by the NPS," which are included with this

Agreement as “Appendix A” and shall be included within the Undertaking’s Special Provisions.

D. All artifacts, specimens, and samples recovered from property that is at the time owned or under the jurisdiction of NPS as a result of investigations conducted pursuant to this MOA are the property of the NPS and will be documented, curated, and conserved, as necessary, according to the standards found in 36 CFR 79, *Curation of Federally-Owned and Administered Archaeological Collections*; the *National Park Service Museum Handbook, Part 1*; and the requirements of the NPS’s Regional Archaeology Program for the storage of objects at the Museum Resource Center. The artifacts, specimens, and samples will be turned over to the NPS upon completion of any archaeological analysis performed as part of this MOA.

V. Archeological Resource Protection Act (ARPA) Permit

A. In accordance with the provisions of the Archeological Resource Protection Act (ARPA), SHA shall obtain an ARPA Permit prior to the start of construction so that archeological work may be undertaken under the terms of Stipulation 2.(a) or Stipulation 3, if warranted.

VI. Performance Standards

A. Professional Qualifications – The MD SHA shall ensure that all cultural resources work performed pursuant to this MOA is carried out by or under the direct supervision of a person or persons meeting at a minimum the Professional Qualifications Standards set forth in the Secretary of the Interior’s Standards for Architectural History and Archeology (36 CFR Part 61).

B. Standards and Guidelines - The MD SHA shall ensure that all cultural resources work carried out pursuant to this agreement shall be conducted in a manner consistent with the principles and standards contained in the documents (and subsequent revisions thereof) listed below:

- *Secretary of the Interior’s Standards and Guidelines for Archeology and Historic Preservation (48 FR 44716-44742) (1983 and successors);*
- *Standards and Guidelines for Archeological Investigations in Maryland (Shaffer and Cole 1994);*
- *Standards and Guidelines for Architectural and Historical Investigations in Maryland (Maryland Historical Trust, 2000);*
- *Guidelines and Resources for Compliance-Generated Determinations of Eligibility (DOEs) (Maryland Historical Trust, 2009);*
- *Advisory Council on Historic Preservation – Section 106 Archaeology Guidance (ACHP 2007);*
- *Recommended Approach for Consultation on Recovery of Significant Information from Archaeological Sites (ACHP 2007) (64 FR 27085-27087);*
- *the Annotated Code of Maryland, Title 10 Subtitle 4, §10-401 through §10-404;*

- *Guidelines for Applying the National Register Criteria for Evaluation, National Park Service Bulletin 15;*
- *Secretary of Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes (1996).*
- *Preservation Brief 2: Repointing Mortar Joints in Historic Masonry Buildings (<http://www.nps.gov/tps/how-to-preserve/briefs/2-repoint-mortar-joints.htm>)*

VII. Curation - The MD SHA shall ensure that all materials and records generated by archeological work conducted on non-NPS owned lands pursuant to the Agreement, including but not limited to recovered artifacts, field notes and forms, photographs, maps, and reports, for which legal title can be obtained, shall be submitted to the MD SHPO for curation in accordance with 36 CFR Part 79. The MD SHA and NPS shall ensure that all materials and records generated by archeological work conducted on NPS owned lands pursuant to the Agreement, including but not limited to recovered artifacts, field notes and forms, photographs, maps, and reports, shall be curated by the NPS National Capital Region Museum Resource Center in Landover, Maryland in accordance with 36 CFR Part 79 and the Archeology Laboratory Manual of the NPS Regional Archeology Program, National Capital Region.

VII. Administration

A. Resolution of Objections by the Signatories - Should the MD SHPO, or any of the signatories to this MOA, object in writing within 30 days to any plans or actions proposed pursuant to this MOA, the FHWA shall consult with the objecting party to resolve the objection. If the FHWA determines that such objection cannot be resolved, the FHWA will:

1. Forward all documentation relevant to the dispute, including the FHWA's proposed resolution, to the Council. The Council shall provide the FHWA with its advice on the resolution of the objection within 30 days of receiving adequate documentation. Prior to reaching a final decision on the dispute, the FHWA shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the Council, signatories and concurring parties, and provide them with a copy of this written response. The FHWA will then proceed according to its final decision.
2. If the Council does not provide its advice regarding the dispute within the 30 day time period, the FHWA may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, the FHWA shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories and concurring parties to the MOA, and provide them and the Council with a copy of such written response.
3. The FHWA's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remains unchanged.

VIII. Resolution of Objections by the Public - At any time during implementation of the measures stipulated in this MOA, should an objection pertaining to this agreement or the effect of the undertaking on historic properties be raised by another consulting party, a concurring party to the MOA, or a member of the public, the FHWA shall notify the parties to this agreement and take the objection into account, consulting with the objector and, should the objector so request, with any of the parties to this MOA to resolve the objection.

IX. Amendment - If any of the signatories to this MOA believes that its terms cannot be carried out, or that an amendment to the terms must be made, that signatory shall immediately consult with the other signatories to develop amendments. If an amendment cannot be agreed upon, the dispute resolution process set forth in Stipulation VII.A will be followed.

X. **Termination** - Any signatory to this MOA may terminate it by providing thirty days written notice to the other parties, provided that the parties will consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination. Termination of this MOA will require compliance with 36 CFR 800. However, notwithstanding the aforementioned, this MOA may be terminated by the execution of a subsequent MOA that explicitly terminates or supersedes its terms.

XI. **Duration** --If the Undertaking has not been advertised within ten (10) years after the execution of the MOA, SHA shall undertake a review of the MOA with all the signatories to determine if the MOA remains valid. If the signatories agree that the MOA requires amendment or termination, a new agreement and consultation shall commence. The signatories may also agree to an extension for carrying out its terms.

Execution of this MOA by the FHWA, NPS, MD SHPO and MD SHA, and implementation of its terms provide evidence that FHWA has afforded the Council an opportunity to comment on the Undertaking and its effects on historic properties, and that FHWA has taken into account the potential effects of the Undertaking on historic properties.

FEDERAL HIGHWAY ADMINISTRATION

By: _____ Date: _____
Gregory Murrill, Division Administrator

MARYLAND STATE HISTORIC PRESERVATION OFFICER

By: _____ Date: _____
J. Rodney Little, State Historic Preservation Officer

NATIONAL PARK SERVICE

By: _____ Date: _____
Gopaul Noojibail, Acting Superintendent
National Capital Parks -- East

MARYLAND STATE HIGHWAY ADMINISTRATION

By: _____ Date: _____
Melinda B. Peters, Administrator

Appendix A

Plan for Treatment of Unanticipated Historic Properties on Lands owned by the NPS, National Capital Parks-East/Suitland Parkway to be included within the Undertaking's Special Provisions

Because the project is within an area of that may have high sensitivity for cultural resources, the construction contractor is alerted to the possibility that buried archaeological features may exist within or adjacent to the construction area. Features that might be encountered include prehistoric artifact concentrations, midden deposits, or features such as pits hearths; and historic artifact concentrations, midden deposits, or features such as wells, structure foundations, or privies.

SHA senior archaeologist Richard Ervin (410-545-2878) (the SHA Archaeologist) shall act as the archaeological liaison with the SHA Construction Engineer and shall attend the pre-construction meeting. The SHA Archaeologist shall be available to report to the job site within 24 hours of notification to inspect any archaeological features that might be discovered during construction.

Discoveries made within lands under the authority of the National Park Service

Prior to the start of construction, and before the start of any and all ground disturbing activities within lands owned by the NPS, specifically the National Capital Parks-East/Suitland Parkway (including all related activities such as utility work and relocations, staging or stockpiling of materials, and establishment of construction trailers and access points), the SHA Archaeologist will hire an archaeological contractor meeting the Secretary of Interior's Standards, and will apply for an ARPA permit through the NPS NCR Regional Archaeologist (Dr. Stephen Potter; 202-619-7280) in case of any inadvertent discovery due to project construction. The SHA Archaeologist and the archaeological contractor shall be available to conduct any and all required archaeological investigations on NPS lands, under the direction of the Park Archaeologist (Kate Birmingham; 202-692-6038) and the NPS Regional Archaeologist.

Should any human remains (hereafter, "Remains") be encountered during construction, all construction work in the vicinity of the Remains shall be temporarily stopped to prevent damage to the Remains, or to any additional Remains that might be present in the immediate vicinity. The SHA Construction Engineer shall immediately notify the Park Superintendent (acting, Gopaul Noojibail; 202-692-6000), Park Archaeologist, Regional Archaeologist, Maryland SHPO (Beth Cole), and the SHA Archaeologist. The SHA Archaeologist shall immediately coordinate with the archaeological contractor to inspect the Remains within 24 hours of notification. The SHA Archaeologist shall prepare a preliminary evaluation of the Remains and shall propose a plan (hereafter, "Plan") for their protection, recovery, or destruction without recovery. Construction shall be temporarily suspended in the immediate vicinity of the Remains until the archaeological investigation has been completed, as provided for in the Standard Specifications for Construction and Materials under Section TC-5.04 (Cultural Resources) and Section TC-4.04 (Work Suspension). Construction can and should continue in all other parts of the project area. If the SHA Construction Engineer determines that the feature is located in a part of the project that will affect the critical path of construction, investigations will be limited to the minimum time required to complete necessary archaeological investigations.

The SHA Archaeologist shall consult with, and shall provide the proposed Plan to, the Park Superintendent, Park Archaeologist, Regional Archaeologist, and Maryland SHPO for their review and approval. The Park Superintendent, in consultation with the Park and Regional Archaeologists, and Maryland SHPO, shall determine the appropriate course of action, following the Department of the Interior's guidelines on human remains.

Should any previously unidentified archaeological sites, artifacts, or materials (hereafter, "Resources") be encountered during construction, all construction work in the vicinity of the Resources shall be temporarily stopped to prevent damage to the Resource, or to any additional Resources that might be present in the immediate vicinity. The SHA Construction Engineer shall immediately notify the Park Superintendent, Park Archaeologist, Regional Archaeologist, Maryland SHPO, and the SHA Archaeologist for their review and approval. The SHA Archaeologist shall immediately coordinate with the archaeological contractor to inspect the Resource within 24 hours of notification. The SHA Archaeologist shall prepare a preliminary evaluation of the Resource and shall propose a plan (hereafter, "Plan") for its protection, recovery, or destruction without recovery. Construction shall be temporarily suspended in the immediate vicinity of the Resource until the archaeological investigation has been completed, as provided for in the Standard Specifications for Construction and Materials under Section TC-5.04 (Cultural Resources) and Section TC-4.04 (Work Suspension). Construction can and should continue in all other parts of the project area.

The SHA Archaeologist shall consult with, and shall provide the proposed Plan to, the Park Superintendent, Park Archaeologist, Regional Archaeologist, and Maryland SHPO. The Regional and Park Archaeologists will determine the appropriate course of action with the SHA Archaeologist; additional specifications are spelled out by the NPS in the "Special Stipulations" section of the approved ARPA permit that will be issued by the Regional Director.

Construction shall be temporarily suspended in the immediate vicinity of the resource until the archaeological investigation has been completed, as provided for in the Standard Specifications for Construction and Materials under Section TC-5.04 (Cultural Resources) and Section TC-4.04 (Work Suspension). Construction can and should continue in all other parts of the project area. If the SHA Construction Engineer determines that the feature is located in a part of the project that will affect the critical path of construction, investigations will be limited to the minimum time required to complete necessary archaeological investigations.

Discoveries made within lands not under the authority of the National Park Service

SHA archaeologist Richard Ervin [(410) 545-2878] shall act as liaison with the SHA Project Engineer and shall attend the pre-construction meeting. The archaeologist shall be available to report to the job site within 24 hours of notification to inspect any archaeological features discovered during construction.

If previously unrecorded archaeological features, artifacts, or other resources are discovered during construction, the contractor shall immediately notify the SHA Project Engineer, who shall coordinate with the SHA archaeologist. Work in the immediate vicinity of the archaeological resource shall be temporarily halted or modified to prevent further damage to the discovered resource, or to any unidentified resources that might be present in the immediate vicinity.

If a discovered resource cannot be avoided by construction, the SHA archaeologist shall perform a preliminary inspection of the resource to evaluate its potential eligibility to the National Register of Historic Places, and, in consultation with the Maryland State Historic Preservation Office (MD SHPO), shall develop a Treatment Plan for its protection, recovery, or destruction without recovery. The archaeological investigation may include further clearing to define the archaeological resource, photography and measured drawings, and excavation of all or part of the resource.

Construction shall be temporarily suspended in the immediate vicinity of the resource until the archaeological investigation has been completed, as provided for in the Standard Specifications for Construction and Materials under Section TC-5.04 (Cultural Resources) and Section TC-4.04 (Work Suspension). Construction can and should continue in all other parts of the project area.

Construction may resume within the area of the archaeological feature once the Treatment Plan has been approved by the MD SHPO, and all of its provisions have been successfully concluded. The SHA archaeologist shall immediately notify the SHA Project Engineer when construction may resume in any areas under a temporary work suspension.

Scheduling Considerations

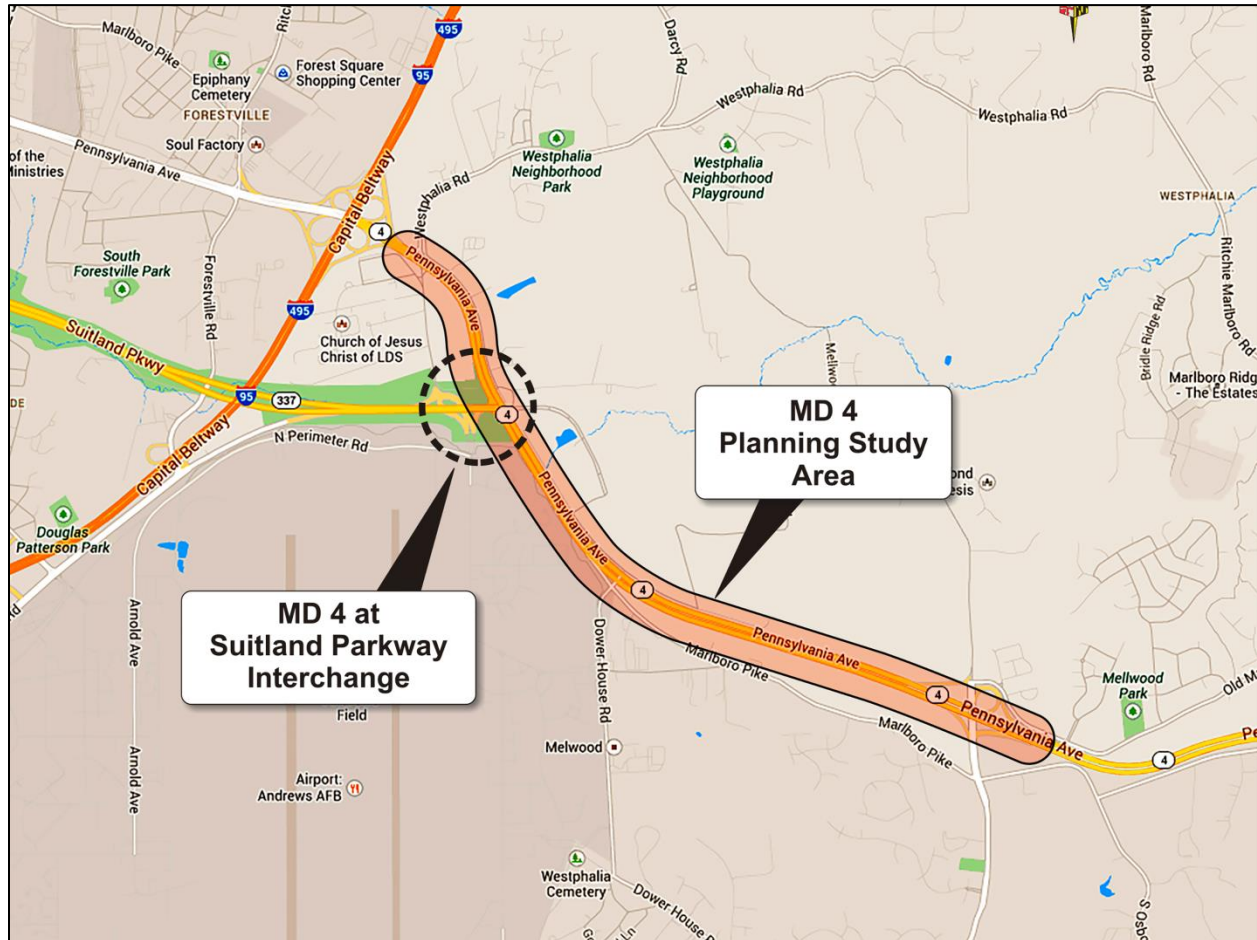
For purposes of preparing the schedule, it is estimated that one archaeological feature may be encountered during construction, but that no suspension of work will be required. Any variation in the actual time required for such work shall be handled under Sections GP-4.04 (Variations in Estimated Quantities) and GP-4.06 (Changes). If such work affects the project schedule, additional time shall be figured on a non-compensable basis.

APPENDIX D:

Draft Section 4(f) Evaluation

MD 4 at Suitland Parkway

Prince George's County, Maryland



Draft Section 4(f) Evaluation

June 2014

Prepared for:

**U.S. Department of Transportation
Federal Highway Administration**

by

**Maryland Department of Transportation
Maryland State Highway Administration**

MD 4 at Suitland Parkway
Prince George's County, Maryland

Project No. PG618C21

ADMINISTRATIVE ACTION


Draft Section 4(f) Evaluation

U.S. Department of Transportation
Federal Highway Administration

and

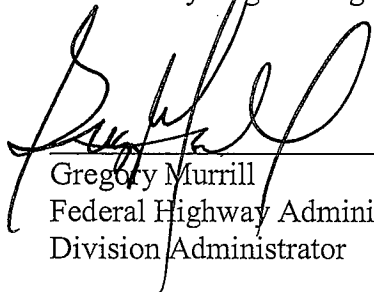
State of Maryland
Department of Transportation
State Highway Administration

MELINDA B. PETERS
ADMINISTRATOR



Gregory I. Slater, Director
Office of Planning and
Preliminary Engineering

6/17/14
Date



Gregory Murrill
Federal Highway Administration
Division Administrator

6/18/14
Date

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I. INTRODUCTION

Section 4(f) of the U.S. Department of Transportation Act of 1966 as amended (49 USC Section 303) stipulates that the Federal Highway Administration (FHWA) and other U.S. Department of Transportation (USDOT) agencies cannot approve the use of land from a significant publicly owned public park, recreation area, wildlife or waterfowl refuge, or any significant historic site unless the following conditions apply:

- There is no feasible and prudent avoidance alternative to the use of land from the property, and the action includes all possible planning to minimize harm to the property resulting from such use; or
- The use of the Section 4(f) properties, including any measures to minimize harm (such as avoidance, minimization, mitigation, or enhancement measures) committed to by the applicant, will have a *de minimis* impact on the property.

This draft Section 4(f) Evaluation has been prepared in accordance with 23 CFR Part 774 and 49 U.S.C. 303 to assess the likely impacts of the proposed action upon Section 4(f) resources, and evaluate options that avoid or minimize impacts to those resources resulting from the proposed action. After careful consideration of any comments received on the draft Section 4(f) Evaluation, a final Section 4(f) evaluation will provide a final determination on whether feasible and prudent avoidance alternatives to the use exist, and whether the proposed action includes all possible planning to minimize harm to Section 4(f) resources.

The Maryland State Highway Administration (SHA) and FHWA are proposing roadway improvements at the intersection of MD 4 and Suitland Parkway, located approximately one mile southeast of the MD 4/Capital Beltway (I-95/I-495) interchange in Prince George's County (**Figure 1**). The MD 4/Suitland Parkway Interchange project would upgrade the existing MD 4 and Suitland Parkway/Presidential Parkway intersection to a grade-separated, signalized diamond interchange with a directional ramp. This is the first phase of the MD 4 Planning Study to receive design funding. The MD 4 Planning Study received Location Approval on May 19, 2000 when the Federal Highway Administration (FHWA) approved the Finding of No Significant Impact/Section 4(f) Evaluation (FONSI/4(f)).

The FONSI-Selected Alternative includes three grade-separated interchanges along the three-mile study area where MD 4 currently intersects with Westphalia Road, Suitland Parkway, and Dower House Road. The MD 4 corridor is classified as an Urban Freeway/Expressway and is included in the State Primary and National Highway System. This section of MD 4 is the only portion of MD 4 east of the Capital Beltway that is not fully access-controlled. MD 4 generally runs in a northwest-southeast direction.

This Section 4(f) evaluation updates the Section 4(f) evaluation completed in 2000 in consideration of recent guidance from FHWA's Final Rule on Section 4(f) (23 CFR 774) as well as more detailed project information resulting from detailed engineering. The evaluation describes Section 4(f) lands within the MD 4/Suitland Parkway interchange project area, potential use of those lands, avoidance alternatives to use of the land, identification of the alternative with the least overall harm, and a discussion of all possible planning to minimize harm.

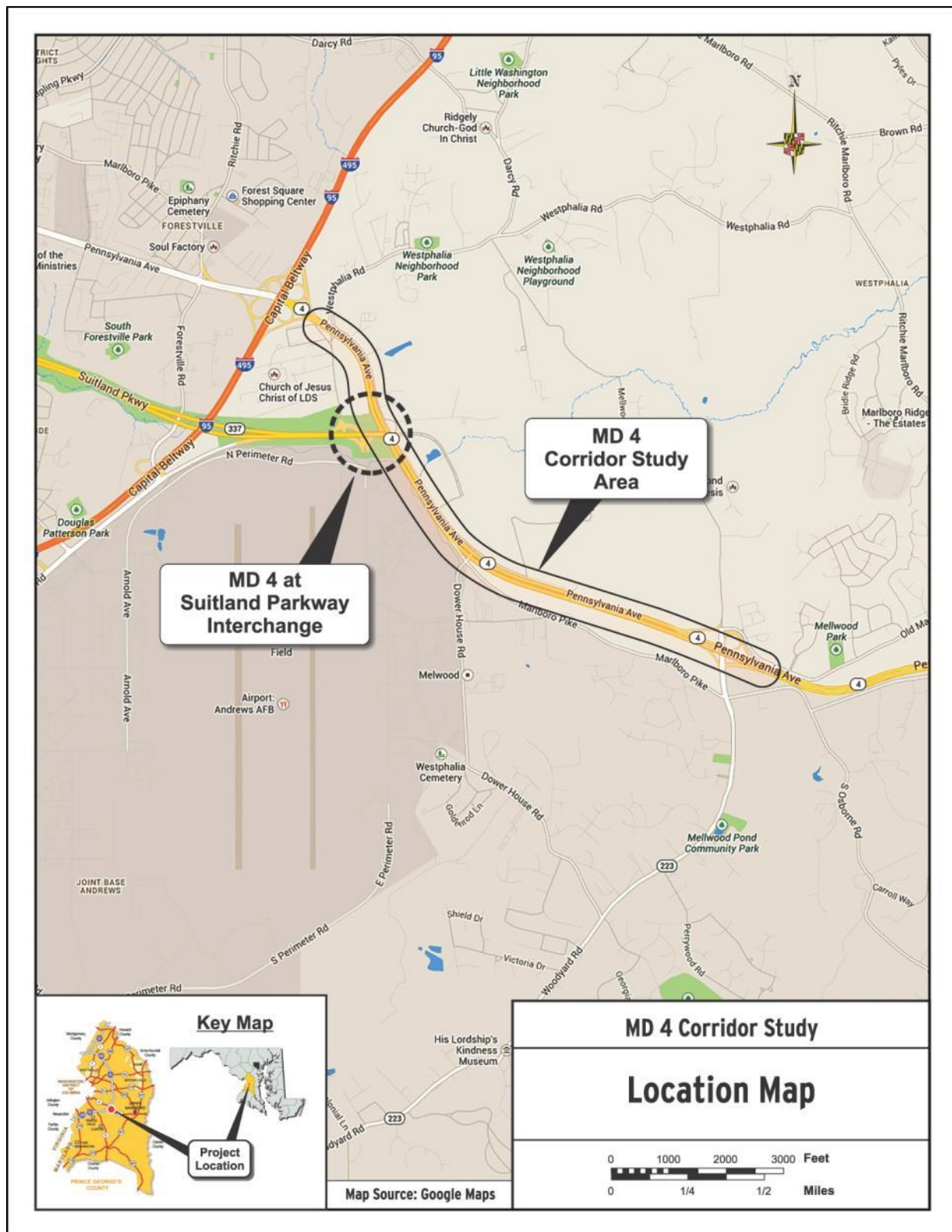


Figure 1: Location Map

II. PROPOSED ACTION

A. Description of Action

The MD 4/Suitland Parkway Interchange is located approximately one mile southeast of the MD 4/Capital Beltway (I-95/I-495) interchange. Suitland Parkway intersects MD 4 in an east-west direction and is the only Section 4(f) property located within the MD 4 Planning Study project area. The proposed action includes construction of a grade-separated, signalized diamond interchange with a directional ramp at the intersection of MD 4 and Suitland Parkway/Presidential Parkway (**Figure 2**). The profile of Suitland Parkway and existing Presidential Parkway would be raised, while the profile of MD 4 would be lowered, allowing Suitland Parkway and existing Presidential Parkway to travel over MD 4. The centerline of MD 4 would be shifted approximately 75 feet east to reduce impacts to Suitland Parkway. Three four-way signalized intersections would be constructed. One signalized four-way intersection would be constructed on the west side of the MD 4 overpass to control traffic between Suitland Parkway and the southbound MD 4 on- and off-ramps. The eastern leg of the interchange (existing Presidential Parkway) would be extended east as outlined in Prince George's County approved developer plans for the area. The extended east-west route would be renamed Central Park Drive. A second four-way signalized intersection would be constructed on the east side of the MD 4 overpass to control traffic between Central Park Drive and the northbound MD 4 on- and off-ramps. Presidential Parkway would be realigned to connect with Central Park Drive via a third signalized intersection, east of the intersection with northbound MD 4 on- and off-ramps.

In addition, Suitland Parkway would be widened as it approaches MD 4. In the proposed typical section, the two existing 12-foot westbound lanes of Suitland Parkway would remain unaltered; however, in the eastbound direction the two existing 12-foot lanes would be widened to four 12-foot lanes. This widening would result in the reconstruction of the south side of the Suitland Parkway Bridge over the entrance ramp to Joint Base Andrews Naval Air Facility Washington (JBA) North Gate. The four lanes would include two through lanes, a shared through-right turn lane, and an exclusive right turn lane which would then proceed onto southbound MD 4 via a free-flowing right turn ramp.

From the northbound MD 4 off-ramp, a two-lane directional ramp would be constructed to facilitate a free-flow movement from northbound MD 4 to westbound Suitland Parkway, crossing over existing Presidential Parkway then curving west to cross over MD 4, descending to a tie-in with westbound Suitland Parkway immediately west of the existing ramp from Old Marlboro Pike and the JBA North Gate.

The proposed action would require utility relocations, including the relocation of approximately 8,800 linear feet of an existing high pressure fuel line crossing Suitland Parkway and serving JBA.

The proposed action includes the construction of a bike/multi-use path connecting Presidential Parkway and developments north of the project with Old Marlboro Pike parallel to the westbound lanes of Suitland Parkway. The existing ramp from Old Marlboro Pike to westbound Suitland Parkway would be removed.

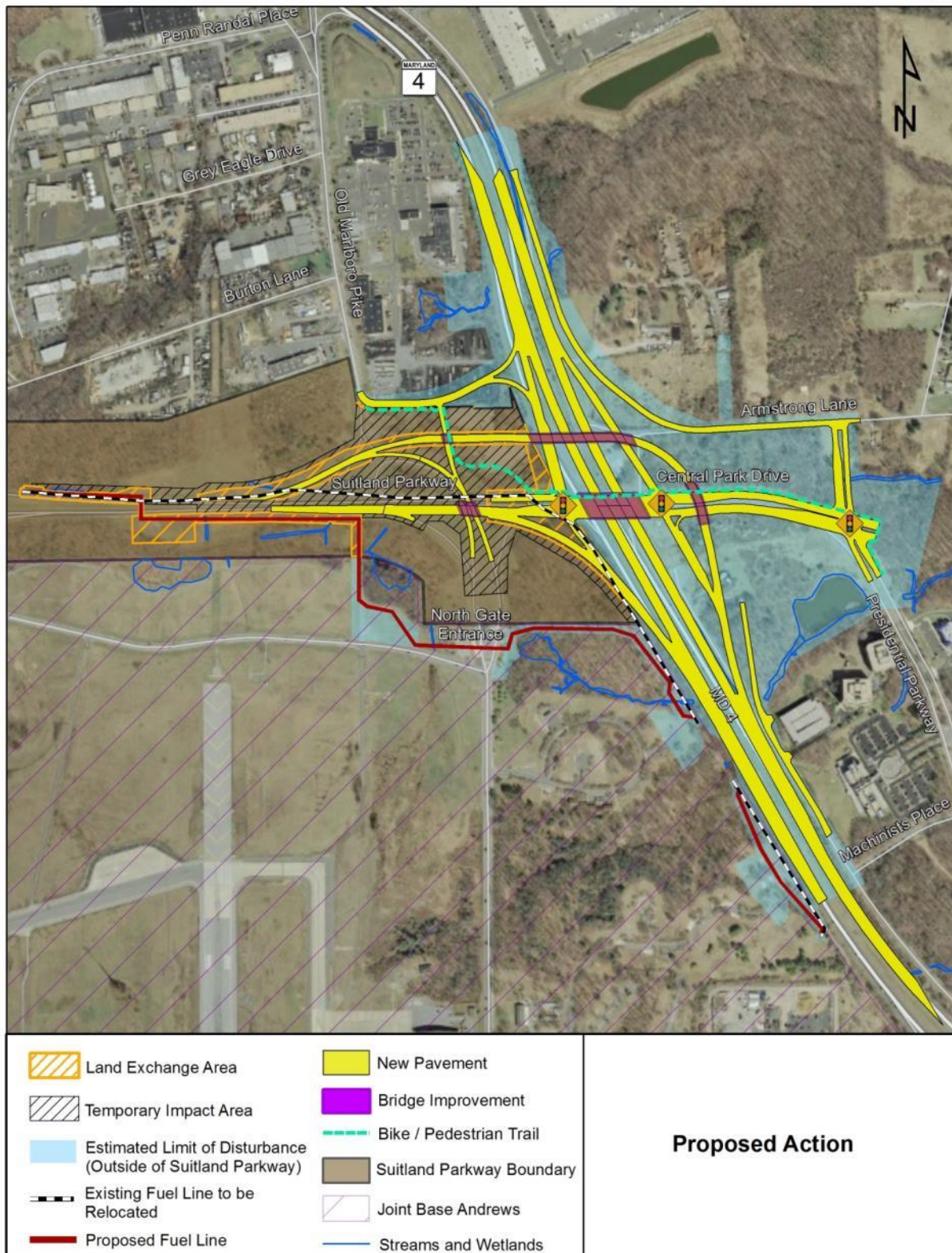


Figure 2: Proposed Action

The proposed action also includes removal of the existing loop ramp from westbound Suitland Parkway to the JBA North Gate. Access to the JBA North Gate would be provided via a newly constructed road extending from the Old Marlboro Pike access road south, under the directional ramp and the Suitland Parkway Bridge over the entrance ramp to JBA North Gate. The existing ramp from JBA North Gate to southbound MD 4 via Suitland Parkway would be removed. Access to southbound MD 4 would be provided via the aforementioned access road providing a connection to Old Marlboro Pike. By way of this road drivers would have the option to continue, via a right-hand turn, onto southbound MD 4. The access ramp from JBA North Gate to westbound Suitland Parkway would be reconstructed to align with the directional ramp tie-in to westbound Suitland Parkway. Interchange construction would require the temporary and intermittent closure of access to the JBA North Gate. All closures would be coordinated with appropriate JBA personnel.

The overall right-of-way (ROW) needs for the proposed action are 44.1 acres, including: the permanent transfer of approximately seven acres of NPS lands to SHA, as detailed in **Section IV**; and two business displacements. Both of the businesses that would be displaced are located on the eastern portion of the proposed interchange. Displacements include an Exxon Service Station and the Presidential Corporate Center Visitor's Pavilion. The proposed action would impact an estimated 2,500 linear feet of streams, less than 0.1 acre of wetlands, and 17.9 acres of forested area. Impacts to resources on NPS lands are outlined in **Section IV**. The estimated construction cost for the proposed action is \$111.8 million. ROW acquisition would be an additional \$8.7 million.

The elimination of an at-grade intersection in favor of a grade-separated interchange would reduce the conflicts and the severity of crashes on MD 4. This is due both to the elimination of the signal on MD 4 as well as the separation of through traffic on MD 4 and Suitland Parkway. Providing a separated free flow lane for the main movements – from northbound MD 4 to westbound Suitland Parkway and from eastbound Suitland Parkway to southbound MD 4 – would further reduce the opportunity for conflicts. Also, the left-turns at the ramp terminal signalized intersections on the overpass would have fewer opposing vehicles because of the grade separation from MD 4.

B. Purpose and Need

The purpose of the proposed action is to increase the roadway capacity to meet existing and 2030 projected travel demands at the intersection of MD 4 and Suitland Parkway and to address safety concerns. This action is needed because the project area currently experiences excessive traffic congestion, which is only projected to increase as future development will bring more commuters to the area.

Background

The project area is the only section of MD 4 between the Capital Beltway and US 301 without full access control. The existing MD 4 typical section from the Capital Beltway east to Dower House Road is four lanes: two lanes in each direction. Outside shoulder use is permitted in the northbound direction during the morning peak hours, when commuter traffic is heaviest. A variable width grass median is provided throughout the project limits. A two-lane service road (Westphalia Center Court North) runs parallel to

the north side of MD 4 between Armstrong Lane and Westphalia Road. This service road is used as relief for MD 4 when congestion levels are severe, especially during the morning peak hours.

The intersection of MD 4 and Suitland Parkway is currently a four-legged, at-grade signalized intersection. MD 4 forms the northern and southern legs of the intersection; Suitland Parkway approaches from the west; and Presidential Parkway approaches from the east. The intersection includes two left turn lanes at both the northbound approach of MD 4 and the westbound approach of Presidential Parkway. A right-turn lane from MD 4 northbound accesses Armstrong Lane and Westphalia Center Court North approximately 300 feet north of the Suitland Parkway intersection. Additionally, Suitland Parkway provides access to the JBA North Gate via a trumpet interchange approximately 0.3 mile west of the MD 4 intersection. A sidewalk along the west side of Presidential Parkway provides pedestrian access between businesses along this route and connects to Westphalia Center Court North; however, no crosswalks or pedestrian friendly signage exists at the intersection of MD 4 and Suitland Parkway/Presidential Parkway.

The *2005 Westphalia Comprehensive Concept Plan* (WCCP) study promotes construction of a high-density, mixed-use development core northeast of MD 4 to Ritchie Marlboro Road, from the Rural Gateway to the Capital Beltway. Its overall Development Concept Plan calls for 6,000 total acres of development, including approximately 15,000 new residential units, up to 4.6 million employment square footage, and around 700,000 retail square footage. Seven new schools, and new police, fire and rescue, library, and health facilities are also expected. The *2007 Approved Westphalia Sector Plan and Sectional Map Amendment* supports and guides this development pattern concept. Because the MD 4/Suitland Parkway interchange has been included in the current Consolidated Transportation Program, the urban development in Westphalia has been approved with the assumption that the interchange project would proceed.

JBA consists of approximately 4,300 acres within the study area. The *Joint Land Use Study*, completed by JBA in 2009 estimated that the 2008 Base population included approximately 17,000 active duty military and civilian employees and military dependents; an additional 2,400 personnel are expected to come from the closure of other bases under the Base Realignment and Closure (BRAC) Program. JBA is a major employment center in Prince George's County.

The area around the MD 4/Suitland Parkway intersection lacks adequate bike and pedestrian facilities to provide continuity and connections between existing and future bicycle facilities in the region. Additionally, the *Preliminary Plan Prince George's 2035* (September 2013) identifies pedestrian and bicyclist safety as a paramount concern for the county. This document goes further to explain that Prince George's County has the highest number of pedestrian deaths per 100,000 residents of any county in Maryland. While MD 4 is not identified as a bikeway, existing and planned development in the area would result in increased bike and pedestrian usage of roadways, including those bisecting MD 4.

Project Need

Level-of-Service (LOS) on expressways and freeways with uninterrupted flow conditions are ranked from LOS A (free traffic flows at high speeds with low volume) to LOS F (total breakdown of traffic flow with frequent delays at high traffic volumes).

Traffic congestion occurs along the MD 4 corridor as a result of ongoing development and growth in commuter traffic volumes from Anne Arundel County, Calvert County, and Southern Prince George's County to Washington, D.C. A 2011 traffic analysis indicated that MD 4 at Suitland Parkway had an Annual Average Daily Traffic (ADT) of 60,500 vehicles and operated at LOS F during the AM and PM peak hours; eight percent of the existing and future volumes are comprised of truck traffic. The 2011 traffic analysis considered further residential, mixed-use, and military development proximal to the study area that has been approved by Prince George's County since completion of the 2000 FONSI. Based on the 2011 traffic analysis for the MD 4/Suitland Parkway intersection, by 2030 ADT at the MD 4/Suitland Parkway intersection is projected to reach 84,450 vehicles. This traffic volume increase would increase roadway congestion and travel time. The 2030 projected volumes, which were developed in 2009, indicate that the peak hour turning movement volumes would be highest for the northbound MD 4 to westbound Suitland Parkway movement, with AM volumes exceeding 2,100 vehicles per hour; and for the eastbound Suitland Parkway to southbound MD 4 movement, with PM volumes exceeding 1,900 vehicles per hour. The intersection currently operates at LOS F during AM and PM peak hours, a condition that will be exacerbated by planned and approved growth along the project corridor.

Crash data was collected for the MD 4 corridor from Dower House Road to I-495 for the time period between January 2010 and December 2012. Within this period, the study area had a total of 171 reported crashes. There were no fatal crashes, 64 injury-related crashes, and 107 property-damaging crashes. The overall crash rate (123.7 crashes/100 million vehicle miles (mvm)) for the corridor is comparable to the statewide average rate (125.9 crashes/100 mvm) for similar state-maintained highways. Of the crash types, the study area's "*Other Cause*" crash rate (11.6 crashes/100 mvm) is higher than the statewide average rate (1.9 crashes/100 mvm). Rear end collisions occur at a higher rate (60 crashes/100 mvm compared to the statewide average of 54.6 crashes/100 mvm), but was not found to be significantly different. Sideswipe and angle crashes were the second and third leading types of crashes. Key factors contributing to the high crash rates are the high volume of vehicles at intersections, weave movements, the high number of conflict points, and the lack of access controls.

The crash experience in the vicinity of the MD 4 intersection at Suitland Parkway (within 0.5 mile) was 22 crashes in 2010, 26 in 2011, and 13 in 2012. Approximately half of the crashes along the study corridor occurred at this intersection. The predominant intersection crash type was rear end crashes and "following too closely" and "failing to obey the traffic signal" were the cause for most of the crashes. Almost half of the crashes occurred at night.

III. SECTION 4(f) PROPERTY

One Section 4(f) property, Suitland Parkway, is located in the western portion of the study area along MD 4. The eastern terminus of the Parkway is located at MD 4 approximately one mile south of the MD 4/Capital Beltway interchange, near the JBA North Gate; the western terminus is located in the District of Columbia at I-295 and the northbound approach to the Frederick Douglass Memorial Bridge (South Capitol Street Bridge over the Anacostia River).

Suitland Parkway spans a total of 9.18 miles, including 6.38 miles through Prince George's County, Maryland, and 2.8 miles through the District of Columbia. The park surrounding the Suitland Parkway

corridor comprises 418.9 acres and is managed by the National Park Service (NPS). Suitland Parkway is owned by United States Government and under the jurisdiction of NPS National Capital Parks-East.

The entirety of Suitland Parkway is a historic district listed in the National Register of Historic Places (NRHP), as part of the multiple property submission for the “Parkways of the National Capital Region, 1913-1965,” under both Criterion A for its association with events that have made a significant contribution to the broad patterns of our history; and Criterion C for its embodiment of the distinctive characteristics of a type, period, or method of construction, or representation of the work of a master, or possession of high artistic values, or representation of a significant and distinguishable entity whose components may lack individual distinction. Per 23 CFR §774.11, Suitland Parkway’s NRHP designation as an historic property qualifies it as a Section 4(f) property subject to the Section 4(f) Evaluation process provided in this document.

Conceived by the National Capital Park and Planning Commission (NCP&PC) in 1937, the Suitland Parkway was one of several parkways built in the Washington, D.C. area. It was constructed during World War II to improve transportation for defense industry employees, and opened to traffic on December 9, 1944. The Parkway corridor is extensively landscaped, with larger trees left standing in the medians, grassy areas, and developments screened where necessary to present a rural-like setting. It has hosted both triumphal and mournful processions of public officials: from presidents returning from diplomatic achievements to the funeral procession of President John F. Kennedy. Presently it is used primarily by commuters and local traffic.

The Suitland Parkway is a nationally significant resource eligible under Criterion A for transportation and Criterion C for landscape architecture related to the parkway system developed during the first half of the twentieth century. The various parkways of the national capital reflect the culmination of several national trends after the turn of the twentieth century: the City Beautiful movements' emphasis on integrated urban green space; automobile proliferation and the rapid development of road systems; and the decline in the quality of city living and resulting popularity of outdoor recreation. Suitland Parkway represents a utilitarian roadway with design features intended to move traffic expeditiously, but with elements of design intended to convey a scenic driving experience characteristic of earlier parkways.

As with other parkways in the Washington, D.C. area, Suitland Parkway is also historically significant because it is associated with key historical figures who played important roles in planning and design, including Gilmore D. Clarke and Jay Downer, principal designers of the Westchester County and Virginia parkways. NCP&PC Chairman Frederick Delano and Thomas Jeffers of the Maryland-NCP&PC also had substantial roles in the origins of the Parkway, especially as funding sources seemed exhausted because of the Great Depression and World War II.

The Suitland Parkway Bridge over the entrance ramp to JBA North Gate is a contributing element of the NRHP-listed Parkway. It is one of the seven bridges the Public Roads Administration contracted for and had constructed on the alignment of the Suitland Parkway in 1944. These bridges consist of double-reinforced concrete rigid frame structures that have stone-faced wing wall and spandrels trimmed with granite dimensioned masonry.

MD 4 provides direct access to the eastern end of Suitland Parkway. Other proximal routes by which users can access Suitland Parkway include Old Marlboro Pike and the JBA North Gate within the study area, and Forestville Road which is located about a mile west of the study area. Presently, there is no designated bikeway accessing this portion of Suitland Parkway.

As previously discussed, there are similar historic parkways in the region, each owned by the United States Government and under the jurisdiction of NPS. These include the Baltimore-Washington Parkway, the George Washington Memorial Parkway, and the Rock Creek and Potomac Parkway. The Baltimore-Washington Parkway is a scenic highway that opened in 1954. It extends north-south between Baltimore, Maryland and Washington, D.C. a distance of 29 miles, and is located approximately ten miles north of the project area. The George Washington Memorial Parkway extends west-east for a distance of 25 miles through Fairfax and Arlington Counties in northern Virginia, hugging the southern shore of the Potomac River, approximately 14 miles west of the project area. The Rock Creek and Potomac Parkway is a north-south route traversing Rock Creek Park in northwest Washington, D.C. for approximately 5 miles from Beach Drive, near the National Zoological Park south to the Lincoln Memorial and Arlington Memorial Bridge; located approximately 13 miles northwest of the project area. Each of these parkways provides scenic access between major points within the National Capital Region serving regional visitors, residents, and commuters.

IV. IMPACTS TO SECTION 4(f) PROPERTY

Impacts to Suitland Parkway include the permanent transfer of NPS lands to SHA, temporary construction impacts, and impacts that would result in a change in the features and attributes of Suitland Parkway.

The proposed action, including the interchange construction and requisite utility relocations, would require the permanent transfer of approximately seven acres from NPS to SHA. The land transfer would occur via a land exchange of fee simple ROW of NPS lands to SHA. Areas identified for transfer include:

- The land that would be occupied by the directional ramp from MD 4 northbound to Suitland Parkway westbound as it traverses Suitland Parkway property, north of the Suitland Parkway mainline;
- Suitland Parkway approaches to the proposed interchange from immediately east of the bridge over the entrance ramp to JBA to the existing SHA ROW; and
- The land that would be occupied by the directional ramp connecting eastbound Suitland Parkway with southbound MD 4.

In exchange for these lands SHA would transfer fee simple ROW of 12.8 acres located at 8801 Fort Foote Road to NPS – National Capital Parks East, as further discussed in **Section VII**.

An estimated 12-acre area of NPS land along the Suitland Parkway would be impacted by temporary construction activities that would span four to five years. This 12-acre area would encompass: staging areas, areas for grading and drainage, the resurfacing and reconstruction of the approach roadways, construction of the bike/multi-use path, and areas for re-vegetation. In addition, SHA would conduct vegetation monitoring and invasive species management for five years following construction within this

area. Temporary use would require the issuance of a Special Use Permit by NPS. There would be no permanent change in the ownership of this area.

Access to and from the JBA North Gate would be modified, as described in Section I of this evaluation. The transportation function and operation of Suitland Parkway would be improved by the increased mobility afforded through the channelized right turn lane from eastbound Suitland Parkway onto southbound MD 4.

Construction of the directional ramp traversing the northwest quadrant of the proposed action would require clearing of the existing NPS storage area. This area would be cleared of accumulated debris and construction stockpiles to accommodate the directional ramp. A bike/multi-use path trail would be constructed along westbound Suitland Parkway from Presidential Parkway to a tie-in with Old Marlboro Pike. It is anticipated that the portions of this trail located on NPS lands could be managed and maintained by NPS following construction.

Impacts to natural resources on park property include approximately 4.7 acres of forest clearing. Waters of the U.S. located within the Suitland Parkway project area include an unnamed tributary to Henson Creek and associated wetlands west of the North Gate (**Figure 2**). Henson Creek is classified as Use I waters (support of estuarine and marine aquatic life and shellfish harvesting) by the Maryland Department of Natural Resources. The proposed action would impact less than 0.1 acre of wetlands and water resources within the park property.

The Suitland Parkway Bridge over the entrance ramp to JBA North Gate, identified as a contributing element to the historic district, would be reconstructed as described in **Section VII**.

Views from Suitland Parkway east toward MD 4 would be permanently impacted by the widening of the roadway; furthermore, the profile of Suitland Parkway would be elevated to cross over MD 4. The directional ramp would contribute to new hardscape within the viewshed of Suitland Parkway, particularly views east and north, as the ramp crosses over Presidential Parkway, MD 4, and the northbound access road exiting the JBA North Gate. The views exiting the JBA North Gate would be impacted by the reconstruction of the Suitland Parkway Bridge over the entrance ramp to JBA North Gate.

Approximately 8,800 linear feet of the high pressure fuel line traversing Suitland Parkway and serving JBA would be relocated to accommodate the interchange construction. Although the fuel line is currently located within NPS ROW, approximately one acre of the aforementioned land transfer is needed to accommodate the fuel line relocation. This property is being included in the land transfer to SHA in accordance with NPS desires and guidance.

The physical and visual impacts of the proposed action would result in an *adverse effect* to Suitland Parkway, as determined by FHWA on March 31, 2010, with the concurrence of the Maryland State Historic Preservation Officer (MD SHPO) dated July 9, 2010, pursuant to Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended. Measures to mitigate the *adverse effect* are outlined in the draft MOA, as described in **Section VII**.

V. AVOIDANCE ANALYSIS

A *feasible and prudent avoidance alternative* avoids using a Section 4(f) property and does not cause other severe problems of a magnitude that substantially outweigh the importance of protecting the Section 4(f) property (23 CFR 774.17). In assessing the importance of protecting the Section 4(f) property, it is appropriate to consider the relative value of the resource to the preservation purpose of the statute. The preservation purpose of Section 4(f) is described in 49 U.S.C. §303(a), which states: “It is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.”

An alternative is not *feasible* if it cannot be built as a matter of sound engineering judgment.

An alternative is not *prudent* if:

- It compromises the project to a degree that it is unreasonable to proceed with the project in light of its stated purpose and need;
- It results in unacceptable safety or operational problems;
- It causes severe social, economic, or environmental impacts even after reasonable mitigation; severe disruption to established communities; severe disproportionate impacts to minority or low income populations; or severe impacts to environmental resources protected under other Federal statutes;
- It results in additional construction, maintenance, or operational costs of an extraordinary magnitude;
- It causes other unique problems or unusual factors; or
- It involves multiple factors above that while individually minor, cumulatively cause unique problems, or impacts of extraordinary magnitude.

Four avoidance alternatives have been developed and are discussed below. Each of these alternatives would completely avoid the Section 4(f) use of Suitland Parkway. Each is analyzed in accordance with the definition of *feasible and prudent avoidance alternative* found in 23 CFR §774.17.

A. Avoidance Alternative 1: No Build

Avoidance Alternative 1 would avoid all Section 4(f) property impacts. Under this alternative there would be no changes to the existing at-grade signalized MD 4/Suitland Parkway intersection beyond routine maintenance and repairs. Planned development along the MD 4 corridor would continue as approved by Prince George’s County, as would other transportation improvements programmed by Prince George’s County or the Maryland State Highway Administration.

There would be no operational improvements or increased capacity at the intersection of MD 4 and Suitland Parkway, so existing and future traffic volumes would not be accommodated at this location. Approved residential, mixed-use, and military development proximal to the study area would continue to cause increased traffic volume along MD 4, with an estimated increase of 39.6 percent between 2011 (ADT 60,500) and 2030 (ADT 84,450). The number of conflict points would remain unchanged. The

intersection would continue to cause substantial difficulties for pedestrians and bicyclists navigating across MD 4. Therefore, Avoidance Alternative 1 would not address the project's purpose and need.

Although Avoidance Alternative 1 would avoid impacts to the Section 4(f) property, it is not prudent because it would 1) be unreasonable to proceed with the alternative in light of the project's stated purpose and need; and 2) result in unacceptable safety or operational problems. Avoidance Alternative 1 therefore causes other severe problems of a magnitude that substantially outweighs the importance of protecting the Section 4(f) property.

B. Avoidance Alternative 2: Upgrade Existing MD 4 and Suitland Parkway Intersection East of Existing Intersection

Under Avoidance Alternative 2 the intersection of MD 4 and Suitland Parkway would be expanded in order to accommodate existing and future traffic volumes to the extent possible while avoiding impacts to Suitland Parkway (**Figure 3**). The entire intersection would be realigned east of its current location to allow these upgrades and still avoid impacts to the Section 4(f) property. To ensure that Suitland Parkway is avoided, the expansion of the intersection would be limited to adding a left-turn lane from MD 4 northbound to Suitland Parkway westbound, resulting in three left-turn lanes. The alignment shift would allow the three left-turn lanes to merge to two lanes prior to merging with Suitland Parkway. Additionally, two channelized right-turn lanes from eastbound Suitland Parkway to southbound MD 4 could be constructed without impacting the Section 4(f) property. The intersection alignment shift would also allow for increased weave distances between MD 4 and the JBA North Gate.

The construction cost of Avoidance Alternative 2 would be between \$19.2 and \$22.1 million. The realigned MD 4 mainline would also require an estimated 0.5 acre of ROW from at least five parcels east of existing MD 4. This area is currently zoned for mixed-use development; however the majority of these parcels are currently undeveloped. One business/commercial property displacement would be required. The cost of this additional ROW is estimated to be \$108,900. This alternative would provide some increase in capacity at the MD 4 and Suitland Parkway intersection; however, the minor intersection improvements would not address the substantial increase in traffic volumes anticipated from future development. The intersection would also maintain the same number of conflict points. The addition of turn lanes would further exacerbate the existing difficulties for pedestrians and bicyclists navigating across MD 4. Therefore, Avoidance Alternative 2 would not address the project's purpose and need.

Avoidance Alternative 2 would impact approximately 2.0 acres of forest. Stream impacts would total approximately 1,200 linear feet and wetland impacts would be less than 0.1 acre.

Although Avoidance Alternative 2 would avoid impacts to the Section 4(f) property, it is not prudent because it would 1) be unreasonable to proceed with the alternative in light of the project's stated purpose and need; and 2) result in unacceptable safety or operational problems. Avoidance Alternative 2 therefore causes other severe problems of a magnitude that substantially outweigh the importance of protecting the Section 4(f) property.



Figure 3: Avoidance Alternative 2

C. Avoidance Alternative 3: Shift Signalized Diamond Interchange with Directional Ramp East

Under Avoidance Alternative 3 the alignment of MD 4 would be shifted east and an interchange would be constructed at MD 4 and Suitland Parkway/Central Park Drive with a configuration that is similar to the proposed action (**Figure 4**). The shift in the alignment of mainline MD 4 would avoid permanent impacts to the Section 4(f) property. Shifting the alignment of the interchange east would require the realignment of Presidential Parkway, which would intersect with Central Park Drive at an at-grade intersection east of the directional ramp. Because of the re-alignment of MD 4, the construction cost of this alternative would be between \$82.2 million and \$94.5 million. Additionally, the realigned MD 4 mainline would require approximately 26.5 acres of ROW from at least 32 individual parcels east of existing MD 4, the majority of which are currently undeveloped, though the area is currently zoned for mixed-use development. The estimated cost of this additional ROW is \$5.7 million. This alternative would displace at least four office buildings, two more than the proposed action. Further, the stormwater management pond maintained by Prince George's County, southeast of Presidential Parkway would need to be reconstructed. Access to Central Park Drive, Presidential Parkway and future developments east of the existing intersection would be provided. These impacts to existing businesses and planned development would constitute a severe economic impact.

Similar to the proposed action, interchange construction with this alternative would provide capacity and operational improvements that would address the project's need to accommodate existing and future travel demand. The interchange would also eliminate a number of vehicle conflict points that exist with the current intersection. Pedestrians and bicycle safety would be improved by providing grade-separated access across MD 4. Therefore, Avoidance Alternative 3 would address the project's purpose and need.

Approximately 12.2 acres of forest clearing would occur with this alternative. Stream impacts would total an estimated 1,000 linear feet and approximately 0.4 acre of wetlands would be impacted, 0.3 acre more than the proposed action.

Although Avoidance Alternative 3 would avoid impacts to the Section 4(f) property, it is not prudent because it would have severe social, economic, and environmental impacts. Avoidance Alternative 3 therefore causes other severe problems of a magnitude that substantially outweighs the importance of protecting the Section 4(f) property.

D. Avoidance Alternative 4: Extending Presidential Parkway to Connect to an Expanded Dower House Road Interchange

Under Avoidance Alternative 4, MD 4 would be depressed similar to the proposed action and a new bridge would carry Suitland Parkway over MD 4; however, no access would be provided between MD 4 and Suitland Parkway. Suitland Parkway would tie into Central Park Drive and Presidential Parkway. Presidential Parkway would be extended south to connect with MD 4 at a proposed interchange with Dower House Road (**Figure 5**).



Figure 4: Avoidance Alternative 3

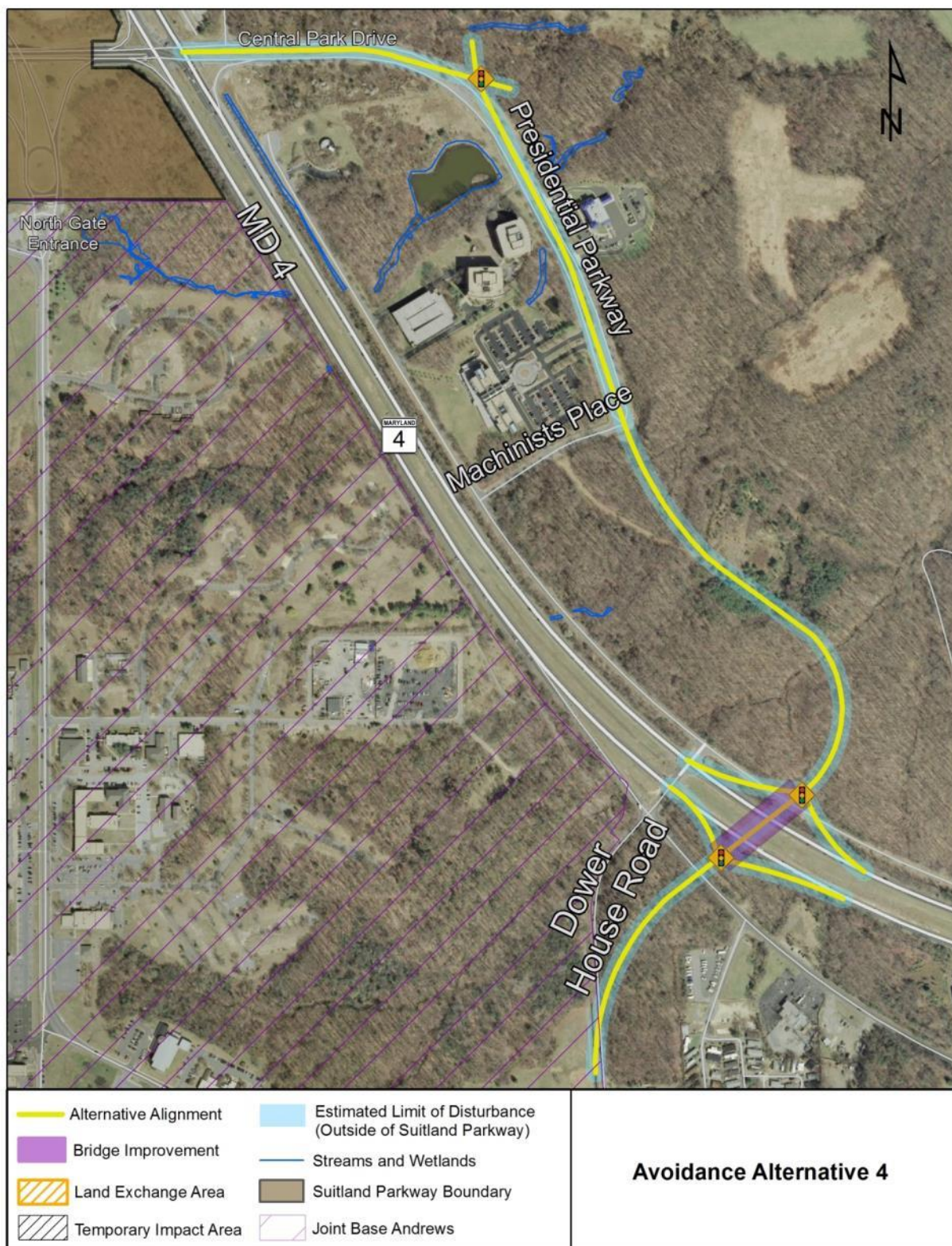


Figure 5: Avoidance Alternative 4

Under this alternative, the MD 4 and Dower House Road interchange – the design for which was identified in the 2000 FONSI – would be re-designed to accommodate existing and future travel demand for Suitland Parkway, Central Park Drive, Presidential Parkway, and Dower House Road. The interchange would eliminate a number of vehicle conflict points that exist at the current MD 4/Suitland Parkway intersection by consolidating movements from the two proposed interchanges into a single interchange. Pedestrian and bike safety would be improved at the MD 4/Suitland Parkway interchange by providing grade-separated access across MD 4.

Extending Presidential Parkway would be consistent with the *2007 Approved Westphalia Sector Plan and Section Map Amendment*, which shows an extension of this roadway southeast to connect with extension of Dower House Road. However, the alignment would be shifted to provide a direct tie-in with the Dower House Road Interchange, potentially impacting future approved mixed use development proximal to this interchange.

Because the Presidential Parkway extension would occur mostly on existing roadway alignment, the alternative would require 6.5 acres of ROW from at least 12 individual parcels east of existing MD 4, the majority of which are currently undeveloped, though the area is currently zoned for mixed-use development. This estimate does not include acquiring Presidential Parkway from Prince George's County. The estimated cost of the additional ROW is \$1.4 million. However, moving the projected traffic from Central Park Drive and Suitland Parkway onto Presidential Parkway would substantially exceed the functional classification of this roadway. Approximately 2 additional lanes in each direction would be needed along Presidential Parkway, and signalized intersections may be required at the entrances to businesses. Increased traffic volumes combined with current access to existing and proposed development would increase vehicular conflict points, as well as present a condition that is inconsistent with drivers' expectations as they travel off of the limited-access Suitland Parkway.

In addition to the existing offices and businesses to which direct access is provided via Presidential Parkway, the approved development plan identifies additional office space to be accessed by the extended Presidential Parkway. Increased capacity along the route would be inconsistent with existing and planned access to and from development.

Based on cursory traffic analysis of the interchange, access from northbound Presidential Parkway onto westbound Suitland Parkway would operate at an LOS F in the AM peak hour; similarly the movement from southbound Presidential Parkway to southbound MD 4 would operate at an LOS F in the PM peak hour. Operational failure of these intersections would cause the MD 4 corridor to become gridlocked. Therefore, Avoidance Alternative 4 would not address the project's purpose and need.

The construction cost of extending Presidential Parkway in addition to any capacity upgrades and construction of the Dower House Road interchange would be between \$59.4 million and \$68.3 million.

Based on a review of aerial imagery, approximately 7.2 acres of forest clearing would occur with this alternative. Stream impacts would total approximately 500 linear feet. It is anticipated that no wetlands would be impacted, based on a review of National Wetland Inventory (NWI) mapping.

Although Avoidance Alternative 4 would avoid impacts to the Section 4(f) property, it is not prudent because it would 1) be unreasonable to proceed with the alternative in light of the projects stated purpose and need; 2) result in unacceptable safety or operational problems; and 3) have severe social, economic, and environmental impacts. Avoidance Alternative 4 therefore causes other severe problems of a magnitude that substantially outweighs the importance of protecting the Section 4(f) property.

VI. LEAST OVERALL HARM

Pursuant to 23 CFR §774.3(c), if the avoidance analysis determines that there is no feasible and prudent avoidance alternative, then only the alternative that causes the least overall harm to Section 4(f) properties may be approved. All remaining alternatives are evaluated to determine which alternative would cause the least overall harm to the Section 4(f) property, Suitland Parkway. This chapter evaluates those alternatives, including alternatives that would avoid or reduce the use of specific contributing elements of the Suitland Parkway.

The remaining alternatives are generally similar to the proposed action, but involve either different interchange configurations for the MD 4/Suitland Parkway interchange, or modifications to the proposed action interchange design.

There are seven factors to be considered in identifying the alternative that would cause the least overall harm (see 23 CFR 774.3(c)(1)). **Table 1** presents a comparison of the alternatives by each factor in relation to the proposed action.

A. Interchange Configuration Alternatives

The following alternatives involve variations to the MD 4/Suitland Parkway interchange configuration that have been developed to compare the relative severity of harm to Section 4(f) property. Each would minimize harm to Suitland Parkway either by reducing the area of impact or eliminating the directional ramp. Although these minimization alternatives would result in less harm pursuant to Section 4(f), they would likely result in an adverse effect to Suitland Parkway pursuant to Section 106 (36 CFR 800.5).

Minimization Alternative 1: Single-Point Urban Interchange

Minimization Alternative 1 consists of a single point urban interchange (SPUI) at the MD 4/Suitland Parkway interchange (**Figure 6**). Similar to the proposed action, MD 4 would be slightly depressed, while Suitland Parkway would be raised to cross over MD 4 via a new bridge. This alternative would reduce the footprint of the interchange by constructing retaining walls to allow the placement of the interchange ramps closer to MD 4. By lessening the distance between the north and southbound on- and off-ramps, access at these ramps would be controlled through a single signalized intersection. Relocation of the existing fuel line would be required to facilitate construction of this alternative. Based on conceptual design it is estimated that the permanent impact to the Section 4(f) property would be approximately 6.4 acres. In addition to reducing the estimated area of impact within the boundary of Suitland Parkway, Minimization Alternative 1 would not likely require the reconstruction of the Suitland Parkway Bridge over the entrance ramp to JBA North Gate. However, the construction of concrete retaining walls would introduce hardscape that would be inconsistent with the Suitland Parkway setting.

Table 1: Least Overall Harm Analysis

Factors for Evaluation of Least Overall Harm per 23 CFR 774.3(c)(1)							
Alternative	i. The ability to mitigate adverse impacts to each Section 4(f) property (including any measures that result in benefits to the property)	ii. The relative severity of the remaining harm, after mitigation, to the protected activities, attributes, or features that qualify each Section 4(f) property for protection	iii. The relative significance of each Section 4(f) property	iv. The views of the official(s) with jurisdiction over each Section 4(f) property	v. The degree to which each alternative meets the purpose and need for the project	vi. After reasonable mitigation, the magnitude of any adverse impacts to properties not protected by Section 4(f)*	vii. Substantial differences in costs among the alternatives
Proposed Action	Strong ability to mitigate impacts, as proposed in the current MOA, and commitment of land transfer to NPS. Refer to Section 7 of evaluation	Harm to Suitland Parkway: <ul style="list-style-type: none"> 7 acres of permanent acquisition Would impact historic bridge Visual impacts from directional ramp 	Only one Section 4(f) property would be impacted	NPS – National Capital Parks East and Maryland Historical Trust agree that the proposed action will have an adverse effect on Section 4(f) properties. An MOA is being developed with these officials to resolve the adverse effect.	Meets the project purpose and need	44.1 acres of ROW 2 Businesses Displaced 2,500 lf of streams 0.1 acre of wetlands 17.9 acres of forest	Construction cost = approximately \$111.8 million Estimated additional ROW cost = \$8.7 million Total estimated cost = \$120.5 million
Interchange Configuration Alternatives							
Minimization Alternative 1: SPUI	Similar to proposed action	Less harm to Suitland Parkway compared to the proposed action: <ul style="list-style-type: none"> 6.4 acres of permanent acquisition Would not impact historic bridge No visual impacts from directional ramp 	Only one Section 4(f) property would be impacted	Through their review of the draft Section 4(f) evaluation, NPS and MHT will have an opportunity to comment on this alternative	Would not provide adequate capacity, therefore, does not meet the project purpose and need	16.3 acres of ROW 1 Business Displaced 600 lf of streams <0.1 acre of wetlands 5.7 acres of forest	Construction cost = \$73.9 – 85.0 million Estimated additional ROW cost = \$3.0 million Total estimated cost = \$76.9 – 88.0 million

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Factors for Evaluation of Least Overall Harm per 23 CFR 774.3(c)(1)							
Alternative	i. The ability to mitigate adverse impacts to each Section 4(f) property (including any measures that result in benefits to the property)	ii. The relative severity of the remaining harm, after mitigation, to the protected activities, attributes, or features that qualify each Section 4(f) property for protection	iii. The relative significance of each Section 4(f) property	iv. The views of the official(s) with jurisdiction over each Section 4(f) property	v. The degree to which each alternative meets the purpose and need for the project	vi. After reasonable mitigation, the magnitude of any adverse impacts to properties not protected by Section 4(f)*	vii. Substantial differences in costs among the alternatives
Minimization Alternative 2: Diverging Diamond Interchange	Similar to proposed action	Less harm to Suitland Parkway compared to the proposed action: <ul style="list-style-type: none"> • 6.3 acres of permanent acquisition • Would not impact historic bridge • No visual impacts from directional ramp 	Only one Section 4(f) property would be impacted.	NPS and MHT will have an opportunity to comment on this alternative through their review of this draft Section 4(f) evaluation	Would not provide adequate capacity, therefore, does not meet the project purpose and need	16.6 acres of ROW 1 Business Displaced 400 lf of streams <0.1 acre of wetlands 5.9 acres of forest	Construction cost = \$77.0 – 88.6 million Estimated additional ROW cost = \$3.6 million Total estimated cost = \$80.6 – 92.2 million
Minimization Alternative 3: Urban Diamond	Similar to proposed action	Less harm to Suitland Parkway compared to the proposed action: <ul style="list-style-type: none"> • 4.6 acres of permanent acquisition • Would impact historic bridge • No visual impacts from directional ramp 	Only one Section 4(f) property would be impacted.	NPS and MHT will have an opportunity to comment on this alternative through their review of this draft Section 4(f) evaluation	Would not provide adequate capacity, therefore, does not meet the project purpose and need	15.7 acres of ROW 1 Business Displaced 1,300 lf of streams <0.1 acre of wetlands 6.2 acres of forest	Construction cost = \$133.8 – 153.9 million Estimated additional ROW cost = \$3.4 million Total estimated cost = \$137.2 – 157.3 million
Minimization Alternative 4: Table Roundabout	Similar to proposed action	Less harm to Suitland Parkway compared to the proposed action: <ul style="list-style-type: none"> • 6.4 acres of permanent acquisition • Would not impact historic bridge • No visual impacts from directional ramp 	Only one Section 4(f) property would be impacted.	NPS reviewed this alternative and based on the analysis completed by FHWA-EFLHD, determined that this alternative was not preferable to the proposed action.	Would not provide adequate capacity, therefore, does not meet the project purpose and need	20.3 acres of ROW 1 Business Displaced 1,300 lf of streams <0.1 acre of wetlands 9.2 acres of forest	Construction cost = \$100.2 – 115.2 million Estimated additional ROW cost = \$6.8 million Total estimated cost = \$107.0 – 122.0 million

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Factors for Evaluation of Least Overall Harm per 23 CFR 774.3(c)(1)							
Alternative	i. The ability to mitigate adverse impacts to each Section 4(f) property (including any measures that result in benefits to the property)	ii. The relative severity of the remaining harm, after mitigation, to the protected activities, attributes, or features that qualify each Section 4(f) property for protection	iii. The relative significance of each Section 4(f) property	iv. The views of the official(s) with jurisdiction over each Section 4(f) property	v. The degree to which each alternative meets the purpose and need for the project	vi. After reasonable mitigation, the magnitude of any adverse impacts to properties not protected by Section 4(f)*	vii. Substantial differences in costs among the alternatives
Minimization Alternative 5: Partial Cloverleaf	Similar to proposed action	Less harm to Suitland Parkway compared to the proposed action: <ul style="list-style-type: none"> • 5.3 acres of permanent acquisition • Would not impact historic bridge • No visual impacts from directional ramp 	Only one Section 4(f) property would be impacted.	NPS reviewed this alternative and based on the analysis completed by FHWA-EFLHD, determined that this alternative was not preferable to the proposed action.	Would not provide adequate capacity, therefore, does not meet the project purpose and need	20.5 acres of ROW 2 Businesses Displaced 1,300 lf of streams <0.1 acre of wetlands 9.1 acres of forest	Construction cost = \$122.1 – 140.4 million Estimated additional ROW cost = \$4.5 million Total estimated cost = \$126.6 – 144.6 million
Minimization Alternative 6: Folded Diamond	Similar to proposed action	Less harm to Suitland Parkway compared to the proposed action: <ul style="list-style-type: none"> • 8.4 acres of permanent acquisition • Would impact historic bridge • No visual impacts from directional ramp 	Only one Section 4(f) property would be impacted.	NPS reviewed this alternative and based on the analysis completed by FHWA-EFLHD, determined that this alternative was not preferable to the proposed action.	Provides capacity and operation improvements to a lesser degree than the proposed action; therefore, does not fully meet the project purpose and need	23.3 acres of ROW 1 Business Displaced 1,300 lf of streams <0.1 acre of wetlands 11.4 acres of forest	Construction cost = \$93.3 – 107.3 million Estimated additional ROW cost = \$5.1 million Total estimated cost = \$98.4 – 112.4 million
Interchange Modification Alternatives							

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Factors for Evaluation of Least Overall Harm per 23 CFR 774.3(c)(1)							
Alternative	i. The ability to mitigate adverse impacts to each Section 4(f) property (including any measures that result in benefits to the property)	ii. The relative severity of the remaining harm, after mitigation, to the protected activities, attributes, or features that qualify each Section 4(f) property for protection	iii. The relative significance of each Section 4(f) property	iv. The views of the official(s) with jurisdiction over each Section 4(f) property	v. The degree to which each alternative meets the purpose and need for the project	vi. After reasonable mitigation, the magnitude of any adverse impacts to properties not protected by Section 4(f)*	vii. Substantial differences in costs among the alternatives
Minimization Alternative 7: Diamond Roundabout	Similar to proposed action	Less harm to Suitland Parkway compared to the proposed action: <ul style="list-style-type: none"> • 10.9 acres of permanent acquisition • Would not impact historic bridge • No visual impacts from directional ramp 	Only one Section 4(f) property would be impacted.	NPS and MHT will have an opportunity to comment on this alternative through their review of this draft Section 4(f) evaluation	Would not provide adequate capacity, therefore, does not meet the project purpose and need	39.0 acres of ROW 1 Business Displaced 1,900 lf of streams 0.1 acre of wetlands 18.9 acres of forest	Construction cost = \$113.8 – 130.9 million Estimated additional ROW cost = \$8.5 million Total estimated cost = \$122.3– 139.4 million
Minimization Alternative 8: Eliminate Directional Ramp	Similar to proposed action	Less harm to Suitland Parkway compared to the proposed action: <ul style="list-style-type: none"> • 3.4 acres of permanent acquisition. • Would impact historic bridge • No visual impacts from directional ramp 	Only one Section 4(f) property would be impacted.	NPS and MHT will have an opportunity to comment on this alternative through their review of this draft Section 4(f) evaluation	Would not provide adequate capacity, therefore, does not meet the project purpose and need	40.6 acres of ROW 2 Businesses Displaced 2,500 lf of streams 0.1 acre of wetlands 17.3 acres of forest	Construction cost = \$107.3 million Estimated additional ROW cost = \$8.1 million Total estimated cost = \$115.4 million
Minimization Alternative 9: Eliminate Channelized Right Turn Ramp	Similar to proposed action	Less harm to Suitland Parkway compared to the proposed action: <ul style="list-style-type: none"> • 5.1 acres of permanent acquisition • Would not impact historic bridge 	Only one Section 4(f) property would be impacted.	NPS and MHT will have an opportunity to comment on this alternative through their review of this draft Section 4(f) evaluation	Would not provide adequate capacity, therefore, does not meet the project purpose and need	42.3 acres of ROW 2 Businesses Displaced 2,500 lf of streams 0.1 acre of wetlands 16.5 acres of forest	Construction cost = \$111.5 million Estimated additional ROW cost = \$8.4 million Total estimated cost = \$119.9 million

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Factors for Evaluation of Least Overall Harm per 23 CFR 774.3(c)(1)							
Alternative	i. The ability to mitigate adverse impacts to each Section 4(f) property (including any measures that result in benefits to the property)	ii. The relative severity of the remaining harm, after mitigation, to the protected activities, attributes, or features that qualify each Section 4(f) property for protection	iii. The relative significance of each Section 4(f) property	iv. The views of the official(s) with jurisdiction over each Section 4(f) property	v. The degree to which each alternative meets the purpose and need for the project	vi. After reasonable mitigation, the magnitude of any adverse impacts to properties not protected by Section 4(f)*	vii. Substantial differences in costs among the alternatives
ANALYSIS RESULTS	All alternatives provide similar ability to mitigate adverse impacts	Minimization Alternative 3 would have the least impact to Suitland Parkway. Each of the remaining minimization alternatives decreases the severity of impacts to Suitland Parkway, by varying degrees.	Only one Section 4(f) property would be impacted, regardless of alternative. Suitland Parkway has a high degree of significance that is important for consideration in the alternatives evaluation.	Both NPS and MHT will have an opportunity to review and comment on this Draft Section 4(f) Evaluation, including the alternatives presented herein.	Only the proposed action fully meets the project purpose and need.	Each of the minimization alternatives offers varying degrees of fewer impacts than the proposed action.	The proposed action would be similar in cost to minimization alternatives 4, 8, and 9. Minimization alternatives 1, 2, and 6 would be less costly than the proposed action; minimization alternatives 3, 5, and 7 would be more costly than the proposed action.

* Impacts quantified here are estimated for the entire interchange construction and include impacts to resources located on NPS lands.

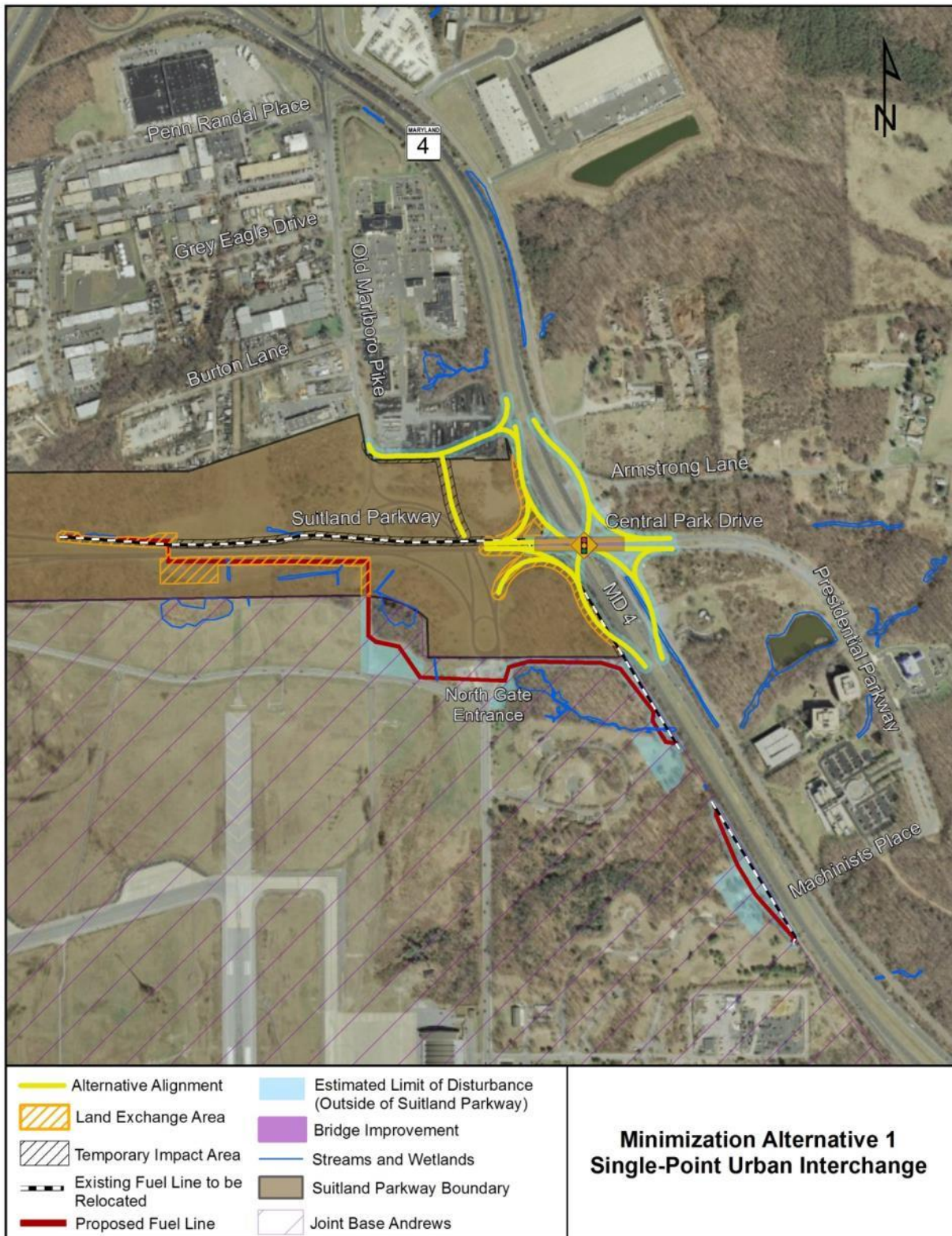


Figure 6: Minimization Alternative 1

Despite the reduction from two signalized intersections to one, the SPUI design would not provide adequate capacity for the peak hour movement from northbound MD 4 to westbound Suitland Parkway. Additionally, because vehicles must be able to cross the same intersection area in six different ways, a SPUI would have a very large area of pavement in the middle of the intersection. The large pavement area offers little space for pedestrian refuge and it can take up to four cycles to walk through the entire length of a SPUI. Additionally, the large pavement area presents challenges for bikes attempting to get through the entire intersection before the signal changes. Because the traffic lights are mounted in the middle of intersection, the bicyclist cannot see when the light changes and traffic begins coming from a different direction. Therefore, the SPUI design would not be compatible with pedestrian or bike access. Minimization Alternative 1 would not address the project's purpose and need.

The overall ROW needs for the SPUI design would be reduced compared to the proposed action. It is estimated that approximately 16.3 acres of ROW would be required to construct this alternative. Access to Central Park Drive, Presidential Parkway, and proposed development east of the interchange would be provided similar to the proposed action. Minimization Alternative 1 would impact an estimated 600 linear feet of streams and 5.7 acres of forest. Based on NWI wetland mapping, wetland impacts would be less than 0.1 acre.

Cursory estimates of the conceptual design indicate that this alternative would cost between \$73.9 million and \$85.0 million to construct. The estimated ROW cost for this alternative would be an additional \$3.6 million.

Minimization Alternative 2: Diverging Diamond Interchange

Minimization Alternative 2 consists of a Diverging Diamond Interchange (DDI) at the intersection of MD 4 and Suitland Parkway (**Figure 7**). The DDI would be similar to a diamond interchange (the proposed action) in that MD 4 would be slightly depressed, while Suitland Parkway would be raised to cross over MD 4 via a new bridge. Interchange ramps would converge with the Suitland Parkway/Central Park Drive main route at signalized intersections on either side of the MD 4 overpass. The DDI would require traffic on the Suitland Parkway/Central Park Drive overpass to drive on the left side of the road. Signals on either side of the overpass would control this movement. This would allow vehicles from the MD 4 off-ramps a continuous flow turn lane regardless of whether they are turning right or left onto Suitland Parkway/Central Park Drive. Also allowed would be two-phase operation at all signalized intersections within the interchange. Based on the location of the existing fuel line, its relocation would be required to facilitate construction of this alternative.

Based on conceptual design it is estimated that the permanent impact to the Section 4(f) property would be approximately 6.3 acres. In addition to reducing the estimated area of impact within the boundary of Suitland Parkway, Minimization Alternative 2 would not likely require the reconstruction of the Suitland Parkway Bridge over the entrance ramp to JBA North Gate.

With this interchange configuration, no left turns would be required to clear opposing traffic, which would reduce vehicular conflict points within the interchange. Additionally, this design increases the capacity of the turning movements to and from the MD 4 on- and off-ramps because each of these would be a continuous flow turn lane. However, a disadvantage of this design is that extensive driver education would be needed to familiarize users with the operations of this interchange, presenting potential safety

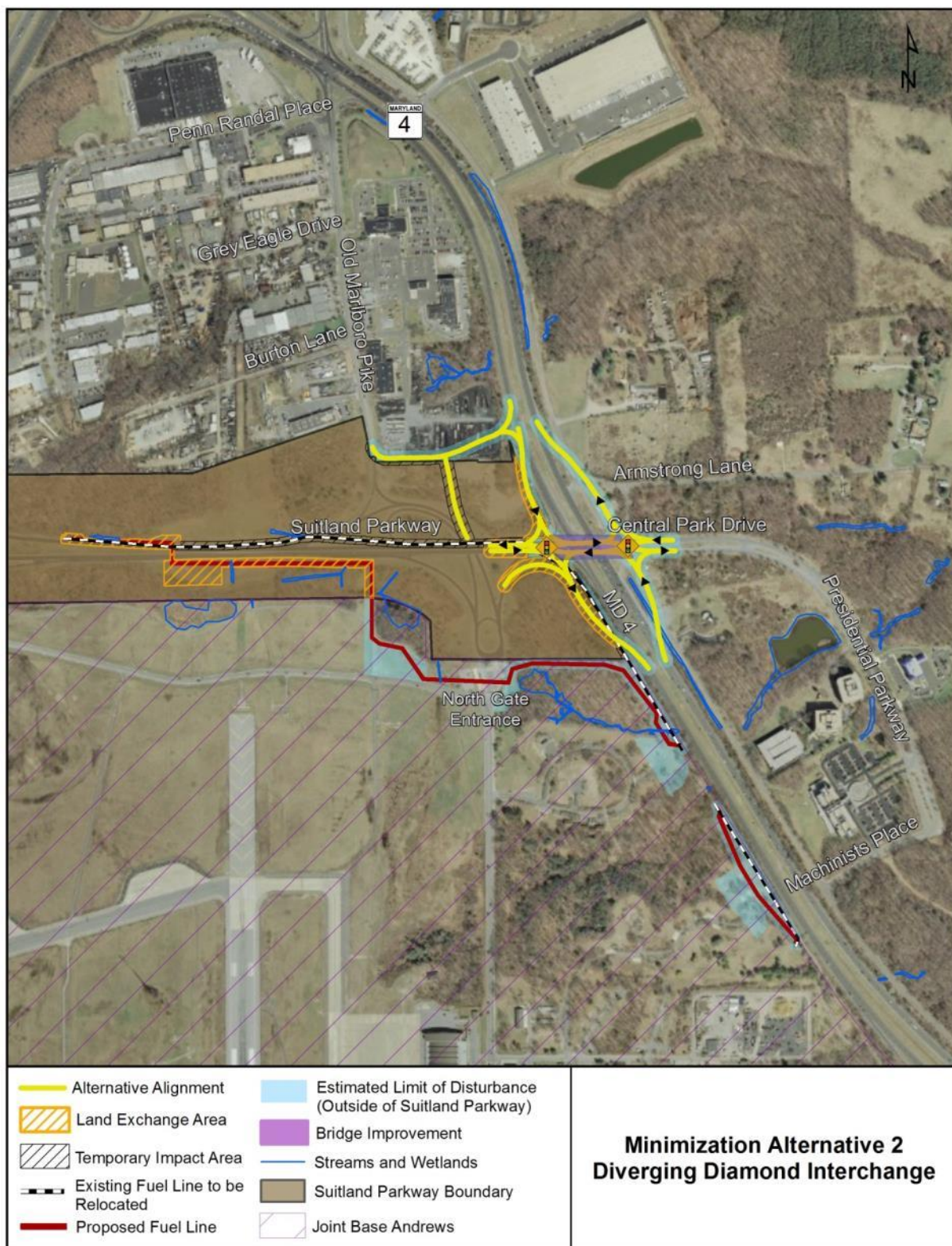


Figure 7: Minimization Alternative 2

concerns. Additional signage, lighting, and pavement would be needed, beyond those typical of a standard diamond interchange. Also, because of unfamiliarity with traffic operations of the DDI, pedestrian usage of Minimization Alternative 2 presents further potential safety concerns. Therefore, Minimization Alternative 2 would not address the project's purpose and need.

Approximately 16.6 acres of ROW would be required to construct this alternative, less than the proposed action. Access to Central Park Drive, Presidential Parkway, and proposed development east of the interchange would be provided similar to the proposed action. Minimization Alternative 2 would impact approximately 5.9 acres of forested area, 400 linear feet of streams and less than 0.1 acre of wetlands based on NWI mapping.

Cursory estimates of the conceptual design indicate that this alternative would cost between \$77.0 million and \$88.6 million to construct. The estimated ROW cost for this alternative would be an additional \$3.6 million.

Minimization Alternative 3: Urban Diamond Interchange

Minimization Alternative 3 is similar to the proposed action in that MD 4 would be slightly depressed, while Suitland Parkway would be raised to cross over MD 4 via a new bridge (**Figure 8**). This alternative would slightly reduce the footprint of the interchange as compared to the proposed action by placing the interchange ramps closer to MD 4. This would be accomplished through the use of retaining walls between each ramp and the MD 4 mainline. The ramps would meet at signalized intersections located above and on either side of MD 4. Because this alternative would not include the directional ramp as included with the proposed action, all traffic traveling from northbound MD 4 onto westbound Suitland Parkway would be required to make a left turn at the signalized intersection located on the east side of the interchange.

Based on conceptual design it is estimated that the permanent impact to the Section 4(f) property would be approximately 4.6 acres for Minimization Alternative 3. However, construction of retaining walls would introduce hardscape that would be inconsistent with the Suitland Parkway setting. Based on conceptual design, Minimization Alternative 3 would likely require the reconstruction of the Suitland Parkway Bridge over the entrance ramp to JBA North Gate.

The signals at the interchange ramp termini would not accommodate the existing and future traffic volumes for this movement, resulting in lengthy intersection queues along the ramp from northbound MD 4. Pedestrians and bike safety would be improved by providing grade-separated access across MD 4. Therefore, Minimization Alternative 3 would not address the project's purpose and need.

The overall ROW needs for the Urban Diamond interchange design would be less than the proposed action. It is estimated that approximately 15.7 acres of ROW would be required to construct this alternative. Access to Central Park Drive, Presidential Parkway, and proposed development east of the interchange would be provided similar to the proposed action. Minimization Alternative 3 would impact an estimated 1,300 linear feet of streams, less than 0.1 acre of wetlands and 6.2 acres of forested area. Cursory estimates of the conceptual design indicate that this alternative would cost between \$133.9 million and \$153.9 million to construct. The estimated ROW cost for this alternative would be an additional \$3.4 million.

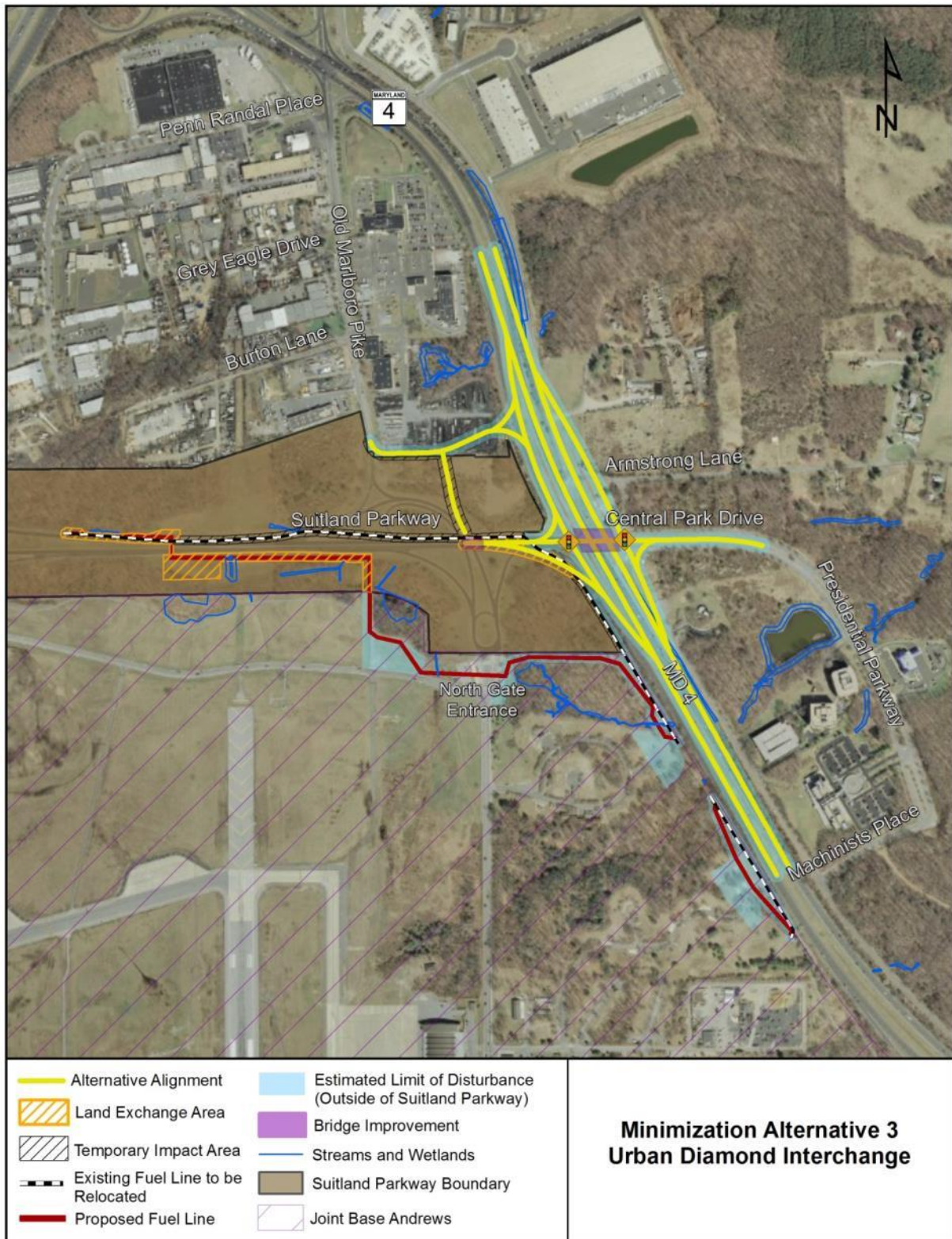


Figure 8: Minimization Alternative 3

Minimization Alternative 4: Table Roundabout Interchange

This alternative was originally developed by the Federal Highway Administration Eastern Federal Lands Highway Division (EFLHD) in 2011. The configuration would include a large roundabout at the center of the MD 4/Suitland Parkway interchange that would address all turning movements (**Figure 9**). A direct ramp from Suitland Parkway eastbound to MD 4 southbound would be provided. The MD 4 mainline would be shifted approximately 75-feet east of its existing alignment and its profile would be lowered; the roundabout would be constructed at an elevated grade, over MD 4, requiring the construction of two bridges spanning MD 4.

Based on conceptual design it is estimated that the permanent impact to the Section 4(f) property would be approximately 6.4 acres. In addition to reducing the estimated area of impact within the boundary of Suitland Parkway, Minimization Alternative 4 would not likely require the reconstruction of the Suitland Parkway Bridge over the entrance ramp to JBA North Gate.

Based on EFLHD's review, this design would fail to meet the purpose and need for the project due to an operational breakdown as a result of the high volume of traffic entering the roundabout. Additionally, bike and pedestrian circulation through or around a roundabout presents safety concerns from the multiple conflict points. The construction of two major bridges spanning MD 4 would contribute to the cost of this alternative. In 2011 EFLHD determined that this alternative should be eliminated from further detailed study. Therefore, Minimization Alternative 4 would not address the project's purpose and need.

The overall ROW needs for the Table Roundabout design would be reduced compared to the proposed action. It is estimated that approximately 20.3 acres of ROW would be required to construct this alternative. Access to Central Park Drive, Presidential Parkway, and proposed development east of the interchange would be provided similar to the proposed action. Minimization Alternative 4 would impact an estimated 1,300 linear feet of streams, less than 0.1 acre of wetlands and 9.2 acres of forested area.

Cursory estimates of the conceptual design indicate that this alternative would cost between \$100.2 million and \$115.2 million to construct. The estimated ROW cost for this alternative would be an additional \$4.4 million.

Minimization Alternative 5: Partial Cloverleaf Interchange

Minimization Alternative 5 was also developed by the EFLHD in 2011. The partial cloverleaf design would shift the MD 4 mainline 75 feet east of its existing alignment. Loop ramps would be constructed in both the north and south quadrants on the west side of MD 4 (**Figure 10**).

Based on conceptual design it is estimated that the permanent impact to the Section 4(f) property would be approximately 5.3 acres. In addition to reducing the estimated area of impact within the boundary of Suitland Parkway, Minimization Alternative 5 would not likely require the reconstruction of the Suitland Parkway Bridge over the entrance ramp to JBA North Gate.

According to the analysis completed by EFLHD, this design breaks down in the AM peak hour, as adequate capacity would not be provided for the volume of traffic circumnavigating the interchange from northbound MD 4 to westbound Suitland Parkway. Further, weaving areas compromise the operations of this design. The complex design and numerous ramps present additional cost and constructability

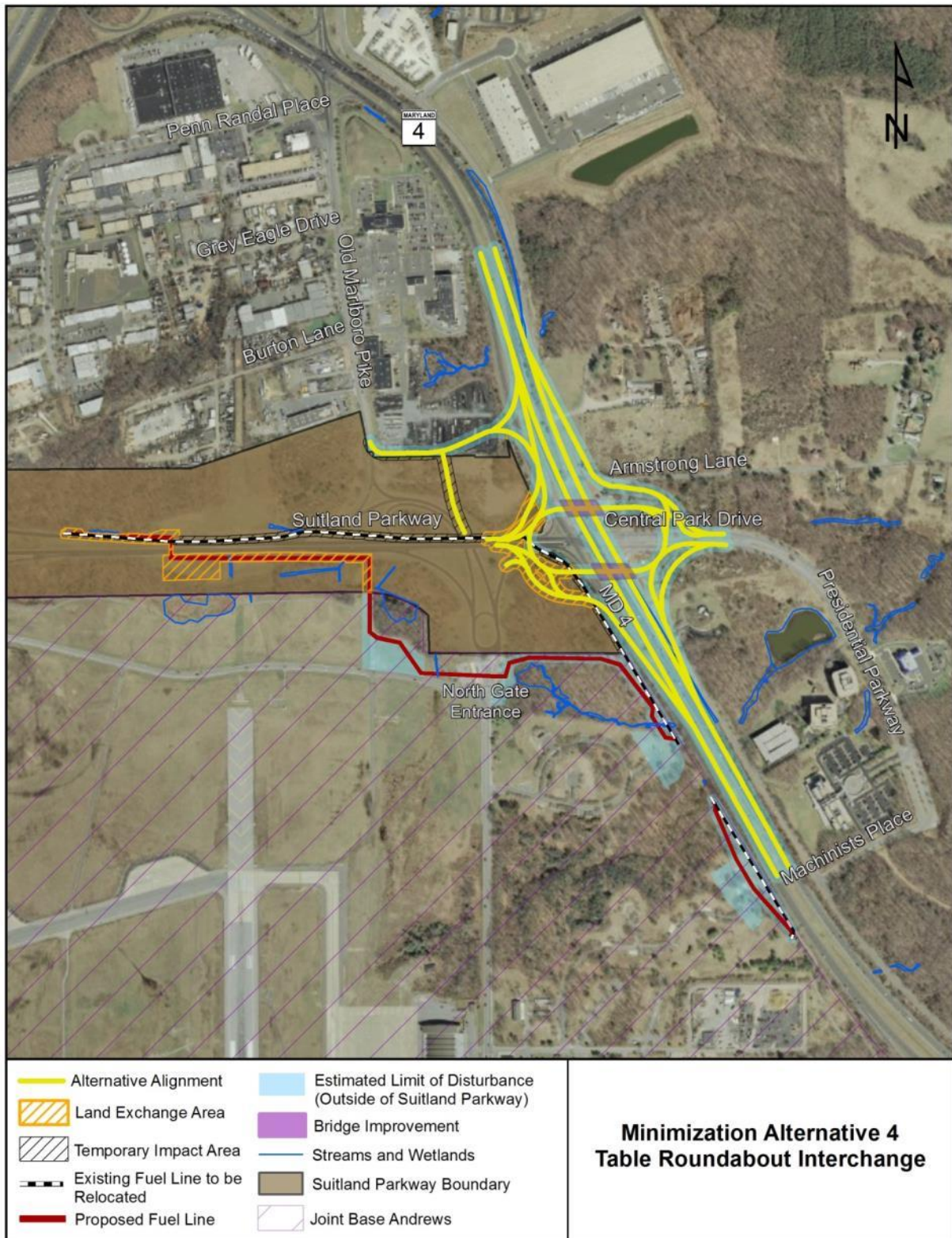


Figure 9: Minimization Alternative 4

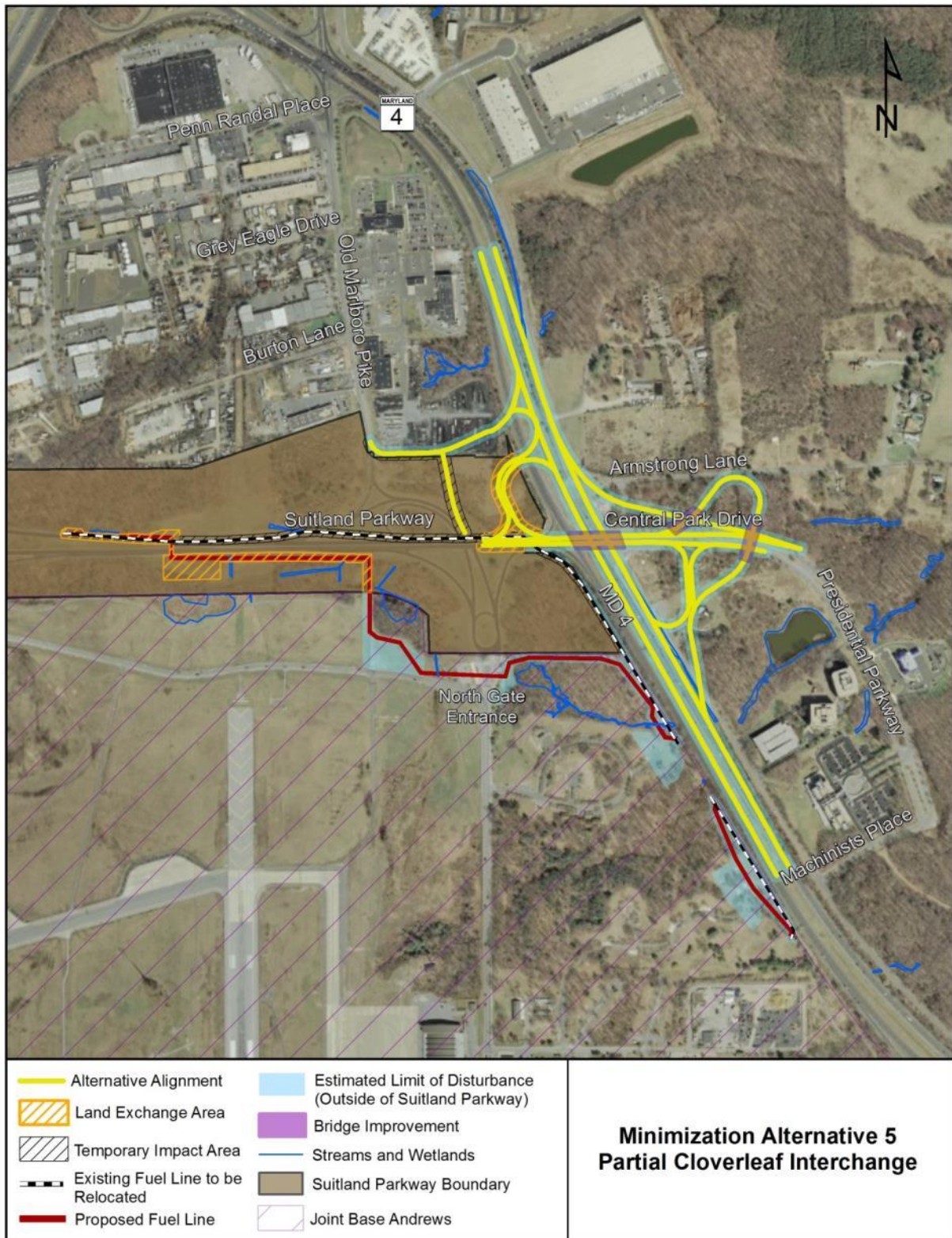


Figure 10: Minimization Alternative 5

obstacles as well. In their 2011 study, EFHLD determined that this alternative should be eliminated from further detailed study. Therefore, Minimization Alternative 5 would not address the project's purpose and need.

The overall ROW needs for the Partial Cloverleaf Interchange design would be reduced compared to the proposed action. It is estimated that approximately 20.5 acres of ROW would be required to construct this alternative. Access to Central Park Drive, Presidential Parkway, and proposed development east of the interchange would be provided similar to the proposed action. Minimization Alternative 5 would impact an estimated 1,300 linear feet of streams, less than 0.1 acre of wetlands and 9.1 acres of forested area.

Minimization Alternative 5 would require three separate bridges in addition to numerous access ramps. Cursory estimates of the conceptual design indicate that this alternative would cost between \$122.1 million and \$140.4 million to construct. The estimated ROW cost for this alternative would be an additional \$4.5 million.

Minimization Alternative 6: Folded Diamond Interchange

Another alternative originally developed by the EFLHD in 2011, the folded diamond interchange would construct double ramps in both the northeast and southwest quadrants of the interchange (**Figure 11**). The approaches of Suitland Parkway and Presidential Parkway would each be widened to ten lanes in order to allow for adequate navigation of the ramps on either side of MD 4. Based on conceptual design it is estimated that the permanent impact to the Section 4(f) property would be approximately 8.4 acres. Minimization Alternative 6 would likely require the reconstruction of the Suitland Parkway Bridge over the entrance ramp to JBA North Gate.

While Minimization Alternative 6 would meet the project's purpose and need by allowing adequate traffic capacity and improving safety for vehicles, bikes, and pedestrians, this alternative would result in a full reconstruction of the Suitland Parkway Bridge over the entrance ramp to JBA North Gate. The wide roadway, complex design and numerous ramps would reduce the area of impact to Suitland Parkway, but would cause greater harm to the character of the Parkway. The design would also be difficult to construct while maintaining traffic flow. During their 2011 analysis EFHLD determined that this alternative should be eliminated from further detailed study.

The overall ROW needs for the Folded Diamond Interchange design would be reduced compared to the proposed action. It is estimated that approximately 23.3 acres of ROW would be required to construct this alternative. Access to Central Park Drive, Presidential Parkway, and proposed development east of the interchange would be provided similar to the proposed action. Minimization Alternative 6 would impact an estimated 1,300 linear feet of streams, less than 0.1 acre of wetlands and 11.4 acres of forested area.

Minimization Alternative 6 would require a single wider and longer bridge over MD 4 in addition to numerous access and loop ramps. As a result, cursory estimates of the conceptual design indicate that this alternative would cost between \$93.3 million and \$107.3 million to construct. The estimated ROW cost for this alternative would be an additional \$5.1 million.

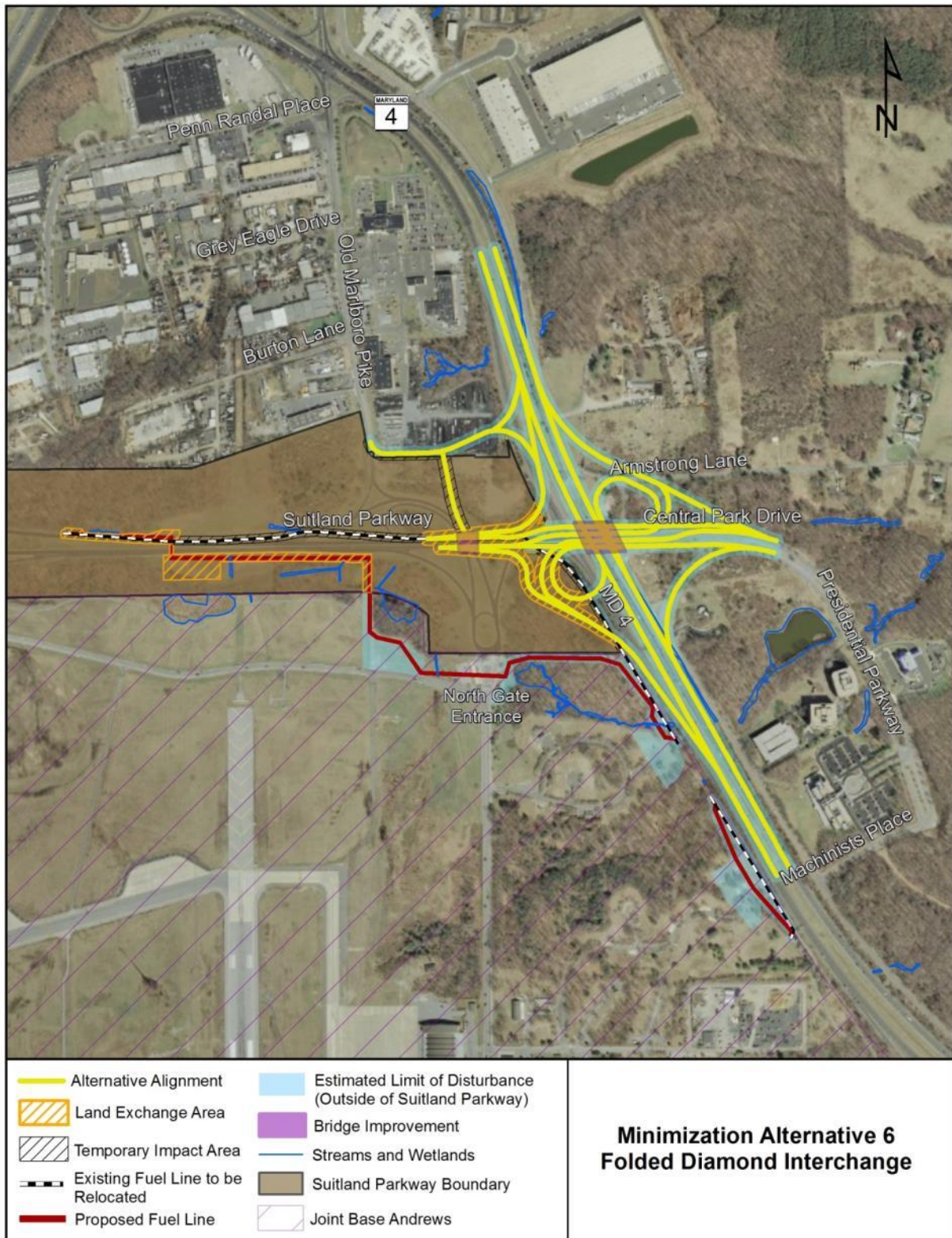


Figure 11: Minimization Alternative 6

B. Interchange Modification Alternatives

The following alternatives modify the design of the MD 4/Suitland Parkway interchange included in the proposed action in order to minimize impacts to Suitland Parkway. Minimization Alternative 7 is depicted in **Figure 12**, while **Figure 13** depicts Minimization Alternatives 8 and 9.

Minimization Alternative 7: Diamond Roundabout Interchange

This alternative is the interchange design that was selected in the 2000 FONSI (**Figure 12**). This alternative would construct a diamond interchange that provides all of the directional movements of the proposed action. However, there are several interchange elements that differ from the proposed action which influence the impact to Suitland Parkway, including the following:

- There would be no directional ramp from northbound MD 4 to Suitland Parkway;
- Two roundabouts would be located on Suitland Parkway at the end of the ramps from MD 4 (instead of the signalized intersections at the ramp termini); and
- The JBA North Entrance would not be modified, and a short directional ramp would be provided from the JBA North Entrance to MD 4 southbound.

Based on conceptual design it is estimated that the permanent impact to the Section 4(f) property would be approximately 10.9 acres. Minimization Alternative 7 would not likely require the reconstruction of the Suitland Parkway Bridge over the entrance ramp to JBA North Gate. This is principally because Minimization Alternative 7 would not include the directional ramp included with the proposed action

Without the directional ramp all traffic traveling from northbound MD 4 to westbound Suitland Parkway would circumnavigate the two roundabouts located at the ramp terminals of the interchange. The roundabouts would not accommodate the existing and future traffic volumes for this movement, resulting in lengthy queues along the ramp from northbound MD 4. Moreover, the east-west movement along Suitland Parkway through the interchange would be affected as the volume of traffic entering from the peak flow legs would consume the available capacity of the roundabout and prevent other traffic from entering the roundabout. The interchange would also operate with less efficient weave conditions for traffic leaving JBA toward southbound MD 4, creating additional potential conflict points and reducing the effective management of congestion for this movement. Further, the roundabout design would be difficult for pedestrians and bicycles to navigate safely. Therefore, Minimization Alternative 7 would not address the project's purpose and need.

The overall ROW needs for the Diamond Roundabout design would be reduced compared to the proposed action. It is estimated that approximately 39.0 acres of ROW would be required to construct this alternative. Access to Central Park Drive, Presidential Parkway, and proposed development east of the interchange would be provided similar to the proposed action. Minimization Alternative 7 would impact an estimated 1,900 linear feet of streams, 0.1 acre of wetlands and approximately 18.9 acres of forested area.

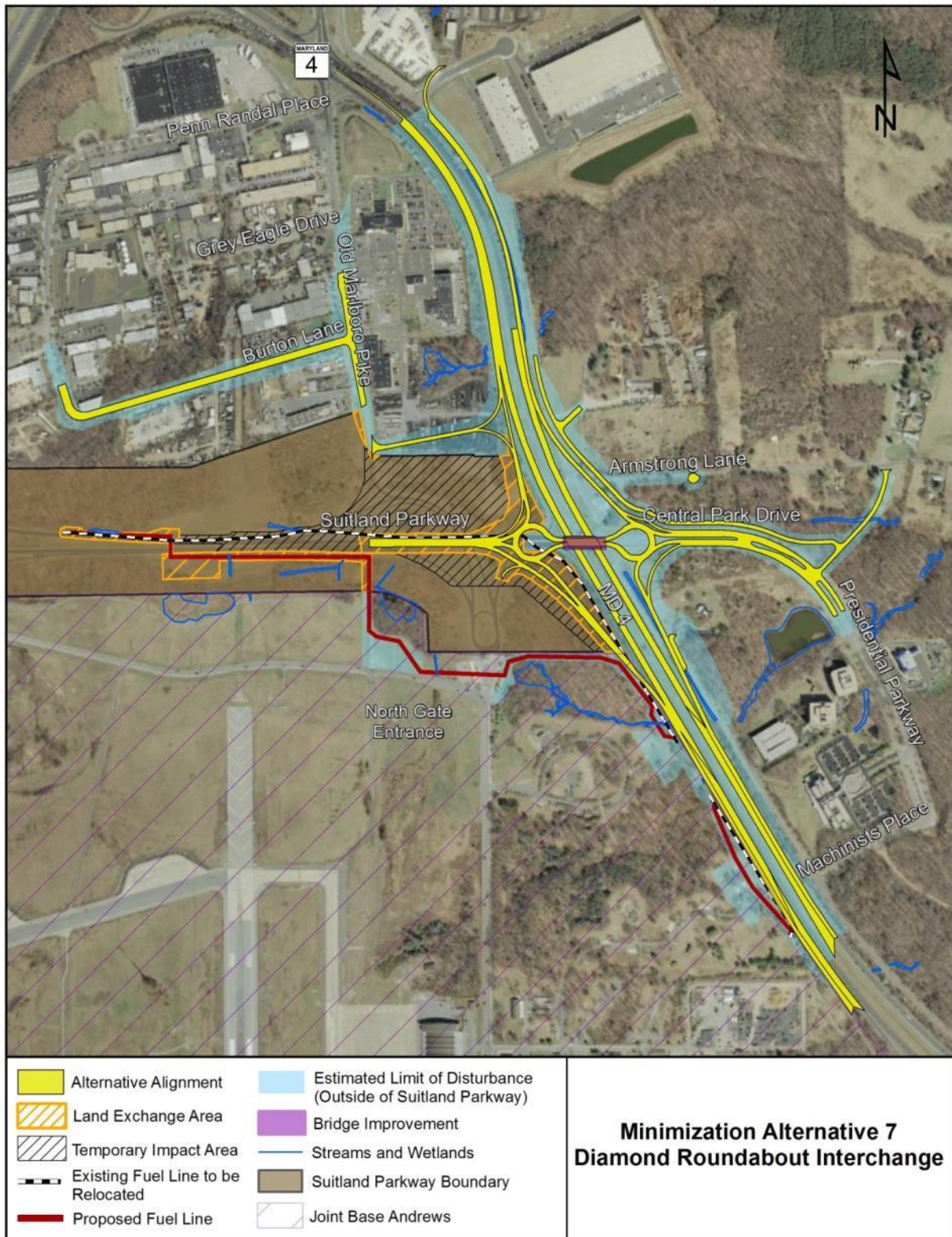


Figure 12: Minimization Alternative 7

Minimization Alternative 7 would cost less than the proposed action because it would not include the directional ramp from northbound MD 4 to westbound Suitland Parkway. Cursory estimates of the conceptual design indicate that this alternative would cost between \$113.8 million and \$130.9 million to construct. The estimated ROW cost for this alternative would be an additional \$8.5 million.

Minimization Alternative 8: Eliminate Northbound MD 4 to Suitland Parkway Directional Ramp

This alternative would be a traditional diamond interchange without the directional ramp that to facilitate travel from northbound MD 4 to Suitland Parkway (**Figure 13**). This modification would eliminate the direct impact to Suitland Parkway at the stockpile yard, and would remove the elevated hardscape from the viewshed of Suitland Parkway. Based on conceptual design it is estimated that the permanent impact to the Section 4(f) property would be approximately 3.4 acres.

Similar to Minimization Alternative 3, this alternative would require that all traffic traveling from northbound MD 4 onto westbound Suitland Parkway make a left turn at the signalized intersection located on the east side of the interchange. The signal would not accommodate the existing and future traffic volumes for this movement, resulting in lengthy intersection queues along the ramp from MD 4. Therefore, this alternative would not address the project's purpose and need.

The overall ROW needs for the Minimization Alternative 8 would be reduced compared to the proposed action because of elimination of the directional ramp. It is estimated that approximately 40.6 acres of ROW would be required to construct this alternative. Access to Central Park Drive, Presidential Parkway, and proposed development east of the interchange would be provided similar to the proposed action. Minimization Alternative 8 would impact an estimated 2,500 linear feet of streams, 0.1 acre of wetlands and 17.3 acres of forested area.

Minimization Alternative 8 would cost less than the proposed action because it would not include the directional ramp from northbound MD 4 to westbound Suitland Parkway. Cursory estimates of the conceptual design indicate that this alternative would cost \$107.3 million to construct. The estimated ROW cost for this alternative would be an additional \$8.1 million.

Minimization Alternative 9: Eliminate Channelized Right Turn Ramp

This alternative would be identical to the proposed action design for the MD 4/Suitland Parkway interchange, but would not include the channelized directional ramp from Suitland Parkway to southbound MD 4 (**Figure 13**). This modification would reduce the amount of Suitland Parkway land that is incorporated into the proposed action in the southwest quadrant of the interchange. Based on conceptual design it is estimated that the permanent impact to the Section 4(f) property would be approximately 5.1 acres.

With this alternative, all traffic traveling from eastbound Suitland Parkway to southbound MD 4 would need to turn right at the signalized intersection on the west side of MD 4. The signal would not accommodate the existing and future traffic volumes for this movement, resulting in lengthy intersection queues along Suitland Parkway. Therefore, Minimization Alternative 9 would not address the project's purpose and need.

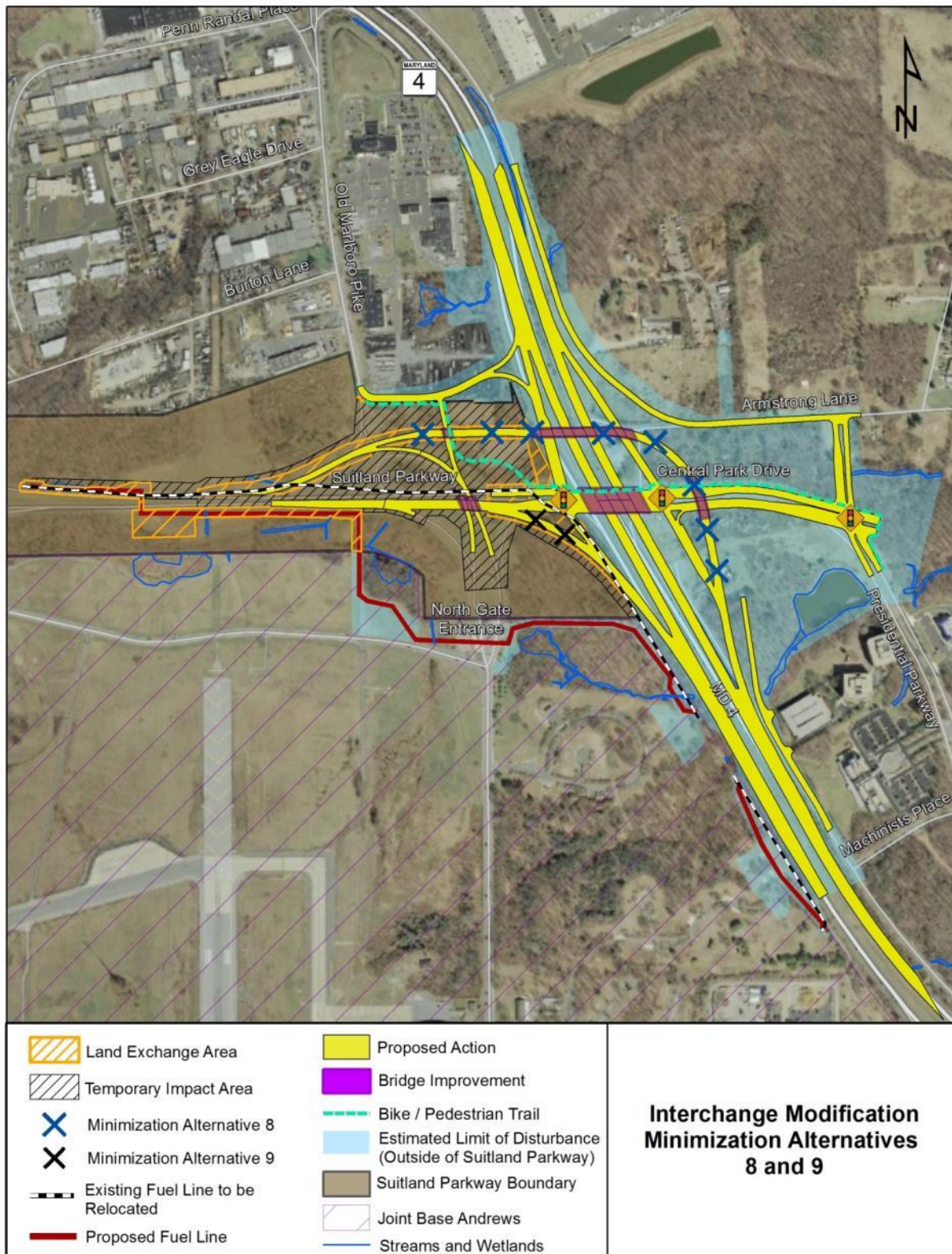


Figure 13: Minimization Alternatives 8 and 9

The ROW needs for Minimization Alternative 9 would be somewhat reduced compared to the proposed action because of elimination of the directional ramp from eastbound Suitland Parkway to southbound MD 4. It is estimated that approximately 42.3 acres of ROW would be required to construct this alternative. Access to Central Park Drive, Presidential Parkway, and proposed development east of the interchange would be provided similar to the proposed action. Minimization Alternative 9 would impact an estimated 2,500 linear feet of streams 0.1 acre of wetlands and 16.5 acres of forested area.

Minimization Alternative 9 would cost less than the proposed action because it would not include the channelized right-turn lanes from eastbound Suitland Parkway to southbound MD 4. Cursory estimates of the conceptual design indicate that this alternative would cost \$111.5 million to construct. The estimated ROW cost for this alternative would be an additional \$8.4 million.

VII. ALL POSSIBLE PLANNING TO MINIMIZE HARM

“All possible planning,” as defined in 23 CFR §774.17, includes all reasonable measures to minimize harm and mitigate for adverse impacts and effects. The proposed action minimizes harm to Section 4(f) resources by incorporating measures into the project that minimize the impact on and the use of the resources. Planning to minimize harm has specifically involved a review of alignment shifts, roadway location in the landscape, retaining walls, other design elements, and mitigation.

Design considerations to minimize harm to Suitland Parkway include carrying Suitland Parkway over MD 4, thus reducing the visual effect of the new interchange at this eastern terminus of the Parkway. The MD 4 alignment has been shifted 75 feet east of its current alignment, minimizing the ROW required from NPS. In accordance with previous requests from NPS, the two-lane directional ramp is reduced to a single-lane prior to its tie in with westbound Suitland Parkway.

Lowering the elevation of the directional ramp as it crosses over Presidential Parkway and the JBA North Gate access road was considered at length. However, safety and constructability considerations, as well as overhead requirements of the routes being crossed dictate the necessary elevation of the ramp.

The use of 2:1 and 3:1 side slopes was a consideration during design of the roadway; however, based on the soil composition and maintenance needs of NPS, it was determined that use of steeper side slopes did not provide an improvement to the design in context of Suitland Parkways needs. Moreover, the Maryland Department of Environment regulations require that the slopes be no steeper than 2:1.

Defining the ROW to be acquired by SHA is the result of at-length discussions to identify areas to be maintained by SHA following construction of the proposed action. Included in the seven acres of property transfer, SHA will acquire the directional ramp as it crosses the Section 4(f) property and the area occupied by the relocated fuel line. The provision to include the fuel line relocation within the land transfer being obtained by SHA comes at the request of NPS. An additional 18-acre easement area would be required to facilitate construction including: staging areas, areas for grading and drainage, the resurfacing and reconstruction of the approach roadways, construction of the bike/multi-use path, areas for re-vegetation, and post-construction vegetation monitoring and invasive species management. There would be no permanent change in the ownership of the easement area.

A Memorandum of Agreement (MOA), signed and completed on August 20, 1999, proposed measures to mitigate impacts to Suitland Parkway based on the FONSI-Selected Alternative. Mitigation discussed in the 1999 MOA included the NPS involvement in the Final Review design of structures and landscaping. This commitment has continued through the project design stages and will continue through construction.

The proposed action also implements many additional design changes compared to the FONSI-Selected Alternative. In support of design discussions and considerations, a new MOA has been drafted for execution by FHWA, NPS, MD SHPO and SHA. The MOA is being developed in accordance with the provisions of Section 106 of the NHPA and its implementing regulations, 36 CFR Part 800. The new MOA is presently under review by its signatories; measures included in the MOA will be addressed in the Final Section 4(f) Evaluation. The MOA stipulates the implementation of numerous measures to minimize harm to the Section 4(f) property, Suitland Parkway. The following are outlined as stipulations of the MOA:

- SHA will require its contractor to salvage and reuse the stone cladding from the historic Suitland Parkway Bridge over the entrance ramp to JBA North Gate. If it is not possible to remove the stone cladding, new stone for the cladding will match the original in color, size, and shape. The name of stone required will be included in the Contract Documents. The mortar used to reset the stone cladding on the south side of the historic Suitland Parkway Bridge will match in color and texture the original mortar on the south side of the bridge, and will be recessed to the same depth from the stone surface as the current mortar on the south side of the bridge. SHA shall make three samples of the new bridge's bonding pattern and mortar available to the MD SHPO and NPS for inspection and approval prior to installation by the Mason. All work resetting the stone façade on the historic bridge will be completed by a mason who has a minimum of five (5) years of experience with repointing historic masonry bridges.
- The exterior of the parapets (bridge rails) as well as the abutments (supporting ends of the bridge) of the Directional Ramp will be clad with a stone and mortar bonding pattern that is similar to, but not replicating the pattern on the historic Suitland Parkway Bridge. SHA will provide new stone for the cladding that is similar to color, size and shape of the stone used for the Suitland Parkway Bridge over the entrance ramp to JBA North Gate. The name of stone required will be included in SHA's Project Construction Contract. SHA shall make three samples of the new bridge's bonding pattern and mortar available to the MD SHPO and NPS for inspection and approval prior to installation by the Mason. All work setting the stone façade on the new bridge will be completed by a Mason who has at least five (5) years of experience with the pointing of stone structures.
- A landscaping plan is being developed in coordination with the NPS and MD SHPO. The landscaping plan will incorporate grading and planting trees, shrubbery and other plants that are visually and historically compatible with the existing historic landscape of the Suitland Parkway.
- As part of vegetative maintenance, SHA will, in consultation with the MD SHPO and NPS, develop and implement an invasive plant removal plan for the area within the MD 4/Suitland Parkway project limits, including the former NPS storage yard.

- NPS – National Capital Parks East will benefit through the acquisition of 12.8 acres located at 8801 Fort Foote Road, adjacent to the NRHP boundary of Fort Foote. While this acquisition will not directly benefit Suitland Parkway, substantial benefits will be generated to the regional park entity through the acquisition of the property. This property was identified by NPS, National Capital Parks East and would provide a necessary natural area buffer between the Fort Foote Park and surrounding residential development.

VIII. COORDINATION

- Department of Interior (DOI) – The Draft Section 4(f) Evaluation will be provided to the DOI for comment.
- National Park Service (NPS) – More than 20 coordination meetings have been held and attended by various representatives of NPS – National Capital Parks East to discuss design changes and considerations since reinitiating the project, following the FONSI/Section 4(f) approval in 2000. **Appendix A** includes a table summarizing meetings and correspondence since execution of the 1999 MOA. The Draft Section 4(f) Evaluation will be provided to the NPS for comment.
- Maryland Historical Trust (MHT) – Substantial coordination with the Maryland Historical Trust has occurred throughout this study. Coordination included efforts to determine the area of potential effects; identify historic properties within the area of potential effects; determine effects to historic properties; and develop minimization and mitigation measures.
- Advisory Council on Historic Preservation (ACHP) – The Advisory Council on Historic Preservation has been consulted during the study and is currently being consulted to resolve the adverse effects on historic properties pursuant to Section 106 of the National Historic Preservation Act.
- Public – The public will have an opportunity to review and comment on the Draft Section 4(f) Evaluation. Comments from the public related to the Section 4(f) analysis and responses to comments will be considered in the Final Section 4(f) Evaluation.

IX. CONCLUSION

This draft Section 4(f) Evaluation has been prepared in accordance with 23 CFR Part 774 and 49 U.S.C 303. Following a 45-day review period, the preceding alternatives evaluation along with any comments received will be considered as a basis for FHWA's final determination on whether feasible and prudent avoidance alternatives to the proposed use exist, and whether the proposed action includes all possible planning to minimize harm to Section 4(f) resources.

Appendix A

MD 4 – Suitland Parkway Interchange

National Park Service, Federal Highway Administration, and Maryland State Highway
Administration Coordination
As of March 28, 2014

	Date	Description	Summary
1.	June 14, 1999	MOA - FHWA, NPS, SHA, MHT	This MOA was signed by NPS 6/14/1999, MHT 5/5, FHWA 8/9, SHA 5/21, and concurred with by ACHP 8/20.
2.	Jan. 19, 2005	FHWA, NPS, SHA	Discussed the Highway Design Div. Project after being on hold. SHA presented the directional ramp option to NPS and explained that changes in traffic volumes due to recent and planned development would cause the EA/FONSI Selected Alternate to fail. The 1999 MOA and potential revisions were discussed. NPS expressed concern for impacts to the gravel terrace forest, a unique vegetative community, and suggested that this design option would provide an opportunity for SHA to mitigate by rehabilitating an existing maintenance area located adjacent to the current intersection.
3.	Sep. 11, 2006	FHWA, NPS, SHA	Presented the direction ramp alternative. Future development and increased traffic volumes were discussed; including the rezoning of adjacent areas by PG County to accommodate multi-use development.
4.	Apr. 4, 2007	FHWA, NPS, SHA	Discussed revisions to the MOA with regard to project changes. A revised directional ramp option was presented that reduced impacts to park property, particularly the area previously cited by NPS as being of significant concern, the terrace gravel forest.
5.	Nov. 13, 2007	FHWA, NPS, SHA	Discussed NPS comments on the project MOA and requested revisions.
6.	Jan. 31, 2008	Letter – SHA to NPS	Provided NPS with information such as the current design plans for MD 4 at Suitland Parkway, environmental impact information, proposed landscaping plans, and a draft amendment to the 1999 MOA.
7.	Mar. 24, 2008	Letter – NPS to SHA	Provided SHA with comments on the project compliance including NEPA, Section 4(f), the Draft amendment to the MOA, and Section 106. Comments were also expressed regarding ROW acquisition, construction easements, property boundary information, future maintenance, the flyover ramp and other design aspects, mitigation, and the landscape plan.
8.	Apr. 2, 2008	Teleconference FHWA, NPS, SHA	Discussed NPS comments on the project MOA.
9.	July 22, 2008	NPS, SHA	Informal review introduced the new NPS Director to several ongoing improvement projects that have potential to impact NPS properties.
10.	Sep. 9, 2008	NPS, SHA	The SHA project team met with NPS staff representative, Tammy Stidham to review NPS comments based on the draft MOA and outstanding items to be addressed.

MD 4 Corridor Study
Preliminary Draft Section 4(f) Evaluation
Appendix A

	Date	Description	Summary
11.	Oct. 28, 2008	NPS, EFHLD, SHA @ NPS	Discussion included a project overview for individuals new to the Suitland Parkway Project, ROW concerns, landscaping concerns and design suggestions. NPS committed to providing SHA with a scope of the FHWA plan review they had requested.
12.	Feb. 19, 2009	Report – SHA to NPS	Draft FONSI/Section 4(f) Reevaluation forwarded to NPS for review and comment concurrent with FHWA review of draft document.
13.	May 2, 2009	Letter – NPS to SHA	NPS provided comments on the draft reevaluation.
14.	Mar. 31, 2010	Letter – SHA to MHT	Re-coordination with MHT, requested concurrence with continued Adverse Effect.
15.	Jun. 2, 2010	FHWA, NPS, EFLHD, SHA	Review of 2 Alternatives proposed by EFLHD. Both eliminated flyover ramp design; one eliminated need to reconstruction bridge over AAFB entrance. SHA to evaluate traffic/LOS.
16.	Oct. 2010	EFLHD,SHA	Staff met to discuss the result of traffic and LOS analysis for the EFLHD proposed alternatives.
17.	July 9, 2010	MHT Response Letter	MHT concurs that the overall undertaking continues to adversely affect historic properties. Rather than amend the existing MOA, requests that a new agreement be developed and suggest a meeting with consulting parties to discuss mitigation opportunities.
18.	Feb. 28, 2011	FHWA, NPS, EFLHD, SHA	SHA and EFLHD presented Folded Diamond Interchange Alternative to NPS staff as an Alternative design which eliminated flyover ramp, but had larger footprint. NPS determined that more information would be needed to determine which Alternative would be preferable to them.
19.	Apr. 4, 2011	FHWA, NPS, EFLHD, SHA	SHA and Design Consultant presented additional impact evaluation as well as rendering of proposed directional ramp (formerly “flyover”) option. NPS consensus was received that directional ramp design would have less adverse impact than the folded diamond design. Project Team to pursue directional ramp design.
20.	June 21, 2011	FHWA, NPS, EFLHD, SHA	Follow-up meeting to discuss next steps as project and design proceeds. Determined that multiple sub-groups would be identified to meet and resolve concerns of interested stakeholders.
21.	July 29, 2011	FHWA, NPS, EFLHD, SHA – CR and Env Compliance Sub-Grp Mtg	Design coordination meeting
22.	Aug. 18, 2011	FHWA, NPS, EFLHD, SHA,	Design coordination meeting
23.	Oct. 13, 2011	FHWA, NPS, SHA @ NPS	Design coordination meeting
24.	Feb. 29, 2012	FHWA, NPS, SHA @ SHA D3	Design coordination meeting
25.	May 21, 2012	FHWA, NPS, SHA @ SHA D3	Design coordination meeting
26.	Dec. 6, 2012	FHWA, NPS, SHA @ NPS	Design coordination meeting

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Date	Description	Summary
27. Jan. 22, 2013	FHWA, NPS, SHA – Field Meeting	Design coordination meeting
28. March, 2013	Letter – NPS to SHA	Expressed support for acquisition of Fort Foote property for replacement for permanent impacts to NPS lands at Suitland Parkway.
29. May 21, 2013 June 20, 2013	Report – SHA to NPS	Fort Foote Property Environmental Site Assessment and Checklist – Submitted for NPS review.
30. Aug. 15, 2013	FHWA, NPS, SHA – Teleconference	Design coordination meeting
31. Aug. 20, 2013	Letter – SHA to NPS	<p>Requested the following by August 30, 2013:</p> <ul style="list-style-type: none"> • Comments on the ESA and an opinion regarding the Fort Foote Property acceptability. • NPS concurrence that land required for the relocated pipeline be added to the project's permanent impacts and therefore be included in the land exchange (increasing perm impacts to 6.942 acres). • NPS comments on the MOA. • A decision from NPS regarding ability to adopt SHA's prepared documents. • Information from NPS regarding costs associated with permit oversight.
32. Sep. 6, 2013	Letter – NPS to SHA	<ul style="list-style-type: none"> • Re-evaluation will not be sufficient to meet NPS NEPA requirements, new EA and Section 4(f) are necessary. • Land exchange of Fort Foote property is contingent on the successful completion of NEPA, Section 4(f) and Section 106. • NPS review of ESA and checklist anticipated by Sep 15. NPS notified of SHA of potential need to update ESA prior to NPS taking title of property. • Acknowledges advantages of expanding the SHA acquisition to include Fuel Line property. • Some elements of the MOA are also contingent on NEPA analysis. • Requested meeting with SHA
33. Sep. 18, 2013	Letter – SHA to NPS	<ul style="list-style-type: none"> • SHA has initiated the acquisition process of Fort Foote property as a <i>protective buy</i>. • SHA requested formal response from NPS regarding approval of the ESA. • SHA requested a listing of specific requirements for DO-12 NEPA approval. • SHA requested NPS to provide next steps to successful land exchange for pipeline relocation. • SHA requested NPS comments on MOA by Sep. 27, 2013. • NPS to inform SHA of desire to have trail extension grading constructed as part of this project or eliminated (save 30" Sweet Gum) by Sep. 27, 2013. • SHA requested comments on landscape drawings by Sep. 27, 2013. • SHA requested senior level meeting with FHWA, NPS, and SHA staff.
34. Nov. 5, 2013	FHWA, NPS, SHA	<ul style="list-style-type: none"> • DO-12 NEPA kick-off meeting

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Preliminary Draft Section 4(f) Evaluation
Appendix A

	Date	Description	Summary
35.	Dec. 12, 2013	FHWA, NPS, SHA	• DO-12 and Section 4(f) evaluation status meeting
36.	Jan. 28, 2014	FHWA, NPS, SHA	• DO-12 and Section 4(f) evaluation status meeting
37.	Feb 19, 2014	Interagency Group	• Agency Scoping presentation for DO-12 NEPA process
38.	Mar. 6, 2014	FHWA, NPS, SHA	• DO-12 and Section 4(f) evaluation status meeting